

**European Association for
Comparative Economic Studies**

Institute of Economics at the Bulgarian Academy of Sciences

**Economies in Transition
and the Variety of
Capitalisms:
Features, Changes, Convergence**

**Edited by:
Mitko Dimitrov,
Wladimir Andreff,
Laszlo Csaba**

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**Proceedings of the 5th Biannual Conference of the EACES
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Preface

This book is a result of the 5th Biannual Conference of the European Association for Comparative Economic Studies "Economies in Transition and the Variety of Capitalisms: Features, Changes, Convergence" held in Varna, Bulgaria, 10-12 September 1998. The host institution of the conference was the Institute of Economics at the Bulgarian Academy of Sciences, Sofia. The conference was organized with the financial support of the East-East Program of the Open Society Foundation. In the conference participated more than 70 representatives from 22 countries from Eastern and Western Europe.

The general purpose of the European Association for Comparative Economic Studies (EACES), founded in 1990, is to initiate and coordinate international collaboration designed to assist the advancement of theoretical and applied knowledge in the field of comparative economic studies in Europe and elsewhere. The general interests of the association are the theoretical analysis in the field and the comparative study of real economic systems. The areas concerned are the economies of East and West, North and South, as well as the economic interaction among systems and among regional areas, such as the EU. The EACES is a broadly based organization in which all schools of analysis are welcomed to exchange views and ideas on current and prospective research. The members are about 450 individuals and several institutions from nearly 40 countries.

The Conference in Varna was opened by the keynote speeches by Prof. Jorge Braga de Macedo from the university of Lisbon and by Prof. Laszlo Csaba, Kopint-Datorg, Budapest. The winner of the EACES Dissertation Award, Dr. Klaus Meyer, has presented his work on FDI in Central and Eastern Europe.

The discussions were organized in 23 panels which compared and generalized the changes in the countries from CEE and CIS as a result of the 10 years transition in the context of the interaction between them as well as with the countries with long-lasting capitalist system by presenting and analysis of wide range of problems concerning the property rights and ownership structure, firms, markets, financial and bank area, investments including the FDI, trade, industrial policy, policies for stabilization, for regional cooperation and for joining the European Union.

In the last day of the conference was organized a round table for discussing of the problems connected with the financial crisis in Russia and its possible impact upon the economies of the other East European countries.

The book includes 28 papers from all discussed fields during the conference. The authors are well-known scientists from Western Europe, Central and South-Eastern Europe, Baltic countries. There were also young scientists which ideas and findings bring interest at the discussions.

We hope that the papers will meet the interest of scientists, students, policy-makers and businessmen and will contribute for their better understanding of the complicated processes which run now in Europe.

Mitko Dimitrov
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Keynote Speeches

Converging European Transitions

Jorge Braga de Macedo*

1. Introduction

The "second world" vanished at the turn of the decade, provoking numerous changes in state boundaries and drastic political, economic and social transformations spanning two continents. There were equally drastic changes in the disciplinary boundaries between "comparative systems", "development studies" and "growth theory" and a new field appeared, called "transition economics". Endogenous growth theories, the balance between history and expectations and the recognition of the role of institutions in maintaining policy credibility were brought to bear in the renewed attempts to understand why growth rates differ among nations and regions. In particular, the question of convergence between a club of about ten "mature democracies" and all other so-called "emerging markets"¹ has widened to include transition economies.

Nearly ten years after the rebirth of multiparty democracy in Poland and Hungary, the failure of soviet-style economic institutions has been felt by the population together with a frustration about the merits of free initiative, especially because it is seen as delivering excessive inequality. This realization is accompanied by awareness that redistributive taxation is less effective than previously thought. Citizens have become more sensitive to threats of increasing taxes to pay for the allegedly universal benefits of social protection. In spite of several instances of popular resistance to social security reform, fiscal policies have been subject to closer scrutiny over the last few years. In spite of the current financial turmoil, the stable economic and financial environment is expected to prevail in the US and across the European Union (EU).

The sustainability of policies without tax increases is now required for their credibility in electoral as well as in financial terms. The reward to sustainable and credible policies at the national level is the ability to carry out enduring reforms. Put in another way, the signal that markets look for when unsustainable policies are spotted is the willingness and ability to start reforming, so as to avoid more taxes - today and tomorrow. Conversely, a comprehensive and effective multi-annual fiscal adjustment strategy

* Sources listed in <http://www.fe.unl.pt/~jbmacedo/transition.htm> and consulting arrangements described therein helped in the preparation of this text

¹ The club does not even include all founding members of OECD. For example, Greece is still in the [Morgan Stanley Emerging Market Index](#) and Portugal graduated from it in 1998.

(MAFAS) is a condition for global convergence of living standards. In a way, such MAFAS replicates the convergence programs that all EU member states, beginning with Italy and Portugal in late 1991, adopted in the run-up to Economic and Monetary Union (EMU).

Openness to international markets for goods, services and assets has also become a criterion for convergence. As emerging markets sought to attract foreign investment in an increasingly globalised competitive environment, the protection of property rights, which requires an effective judicial system and the respect of civil rights, also became a criterion for real convergence. Convergence is now seen as a policy, a matter of choice for national governments.

Given that public choice differs from individual preferences, not all societies will manage to agree on the institutions which will allow them to develop and grow. In the limit, the question for domestic wealth owners becomes one of comparing the risk and return characteristics of various investment strategies for their firms. Their residence may give them a home bias relative to other international investors - but if the investment climate deteriorates too much, either because of macroeconomic instability or because of widespread corruption or both, they and their capital will move out. Where lifetime poverty is pervasive and there are no commercial traditions, let alone democratic institutions, the pressures of global business may be even more difficult to reconcile with the aspirations of civil society. Yet reforms promoting property rights and open markets would put the economy onto a converging path, keep domestic capital at home and attract foreign investment.

In a European economy formerly tied to the "second world", this would be a *converging European transition*. In this regard, the transition economics followed here differs most from comparative systems for it suggests that there is little hope for a national economy to grow if its policies do not somehow respect property rights and keep markets open. Instead, the assumption is that the same basic rules apply across the board but they must be adapted to the particular historical and geographical circumstances, including the nation's capacity to transform¹.

This global policy convergence has already begun in the EU where multilateral surveillance procedures and convergence programs have been implemented to facilitate progress towards a medium term orientation of macroeconomic policy. Given price stability and sound finances, EMU should in turn allow a better functioning of labor and capital markets²

In this regard, appropriate budgetary procedures continue to be an important responsibility of member states or of their local authorities. For the MAFAS to serve as an effective commitment technology, it must be based on appropriate budgetary procedures.

Will global policy convergence impact on the so called transition countries in Eastern Europe and the former Soviet Union? The category, which basically coincides with the

¹ This was Kindleberger's classic indicator for the ability of a national economy to capture the gains from international trade. The "comparative systems" literature was often agnostic with respect to property rights. Early awareness of the importance of the incentive structure appeared in Koopmans and Montias (1971).

² This assumes that the so-called Euro holdup problem is overcome. See my 1997, with an application to Portugal and note 15 below.

countries of operations of the European Bank for Reconstruction and Development (EBRD), comprises the Commonwealth of Independent States (CIS), former Yugoslav republics, Albania, Mongolia and 10 central European applicant states (henceforth CEAS), with which the EU Commission negotiated accession partnerships earlier this year³. The few underdeveloped countries in Africa, Latin America and Asia - including China - where ownership of capital by domestic residents remains outlawed do not belong to the category.

When policies are not promoting growth and convergence, structural reforms are necessary. In this regard, the difference between transition and development becomes again relevant. Given that transition economies have experienced a substantial fall in their perceived standard of living, the ability to recover through accelerated growth is even more decisive than in an emerging market without any such memory. The nature of social protection may be difficult to change without threatening social cohesion⁴. This will be especially poignant in countries where European values have been traditionally held, as is the case of the CEAS. In effect, the tradition may have been forgotten by decades of inadequate policies to the point that a change in economic regime may be required for transition to be sustainable.

While no EU member state experienced comparable restrictions on their civil and property rights, there were periods of non-democratic government in Greece, Portugal and Spain which were only partly compensated by open trade and outward migration. Civil liberties were restored in the mid 1970s but, at least in the case of Portugal, property rights were not duly protected until privatizations were allowed in the late 1980s. On the other hand, in democracies like Finland, property rights were strongly limited by state regulation during the cold war period. In the case of Italy, while civil and property rights were adequately protected, many public-private partnerships were tainted with corruption exacerbating the bias towards excessive public spending and taxation. All of these countries changed their economic regime through a series of structural reforms where the pressure of qualifying for EMU played a crucial role. They represent models for the converging European transitions analyzed in this paper.

The fulfillment of the EMU convergence criteria is not part of the EU enlargement negotiations. Nevertheless, the needed change in the economic regime of the CEAS is already monitored by world financial markets. The reason for this scrutiny is that the regime change requires that the MAFAS be credible because stability will have to be sustained after EU membership⁵. Sustainability also depends on avoiding excessive costs in terms of social cohesion.

The rest of the paper is in four sections and a conclusion. Section 2 discusses EU enlargement as part of the global environment, including the evidence for policy convergence worldwide. The main effect on growth and investment is seen to depend on the progress of transition rather than on geographical proximity to the EU. This is followed in section 3 by a macroeconomic framework for policy sustainability which serves as a guide for the credibility of the MAFAS. The timing of a convergence

³ The documents are available in the DG1a home page.

⁴ This is developed in Kolodko (1998). See also my introduction to UN 1997.

⁵ There is an obvious parallel for EU states. The "excessive deficit procedure" included in the EU Treaty served as an entry criterion for the Euro whereas the commitment technology included in the Stability Pact agreed upon in late 1996 will ensure that the fiscal criteria are not violated.

program to macroeconomic stability is deduced from a policy matrix. Section 4 specifies the structural dimension in the form of principles of good government at the public and corporate levels which reflect the standards found in mature democracies. The guidelines on *Sound business standards and corporate practices* promoted by the EBRD are emphasized. Section 5 adds the dimension of crisis management which has been brought to the fore since the Asian crisis of the Summer of 1997 and more intensely for transition economies since the Russian collapse of late August 1998. Section 6 concludes.

2. The European and Global Environment

In our interdependent world economy nation-states are confronted with global challenges⁶. They reflect the constraints coming from property rights and international exchange. But they also face constraints coming from expectations. Policies which cannot be sustained without future tax increases elicit negative reactions from voters and financial markets. The sustainability of policies without future tax increases is in turn required for their credibility.

The protection of property rights of residents as well as of non-residents and the promotion of international trade in goods, services and assets is a significant signal that no surprise taxation is intended. Such signals may be required, even though the movement of people remains the exception rather than the rule, both nationally and internationally. The reason is that more and more people are exposed to realities beyond their immediate horizon in space as well as in time. The importance of market perceptions of national policies, alongside voter sentiment, is reinforced by personal mobility.

Increased sensitivity to global trends means that interdependence has become a structural feature of the international system. It can no longer be ignored in the design of institutions which used to be purely domestic concerns, such as taxes, social security and other budgetary procedures, let alone their monetary counterparts. Moreover, it can make reform more costly or less enduring, to the extent that mechanisms of peer pressure and multilateral surveillance are weaker than free ride and regulatory capture.

This is why forms of regional association have emerged among developed as well as developing nations. It is fair to mention the EU as the most ambitious such association, but the North American Free Trade Association (NAFTA, including Canada, Mexico and US) and Mercosul (Argentina, Brazil, Paraguay and Uruguay) have also shown ambition. And there are cases in point in other continents, like the Southern African Development Community and the Asia-Pacific Economic Conference.

The global environment has become more turbulent for emerging markets as successive financial crises have undermined confidence in Asian economies, including Japan and Russia. In the current environment, the impact of EMU and EU enlargement on competition, trade and the overall investment climate may seem less salient than the changing prospects for the world economy. In any event, EMU and EU enlargement will strengthen the case for policy convergence and therefore increase the costs of divergence and of reversals in the transition in both the CEAS and the CIS.

⁶ This section draws on my 1997a

2.1. Global Policy Convergence

Interdependence brings a tendency for convergence in economic, political and even in social behavior, as a means to preserve the society's values in a competitive global environment. In contrast to the global reach of the market, and the technological forces which make protection inefficient and inequitable, preferences between private and public goods used to be seen as local. This was supposed to rationalize severe spatial differences in the burden of taxation in the so called "first" and "second" worlds. The developing nations of the "third world" were supposed to chose the market or plan model based on preferences. No longer. In spite of the wide variety of institutional arrangements, there is widespread consensus that economic and social development is associated with policies of open economy and polity, whereas underdevelopment or stagnation stems from policies of economic autarky and political repression.

The demise of the former Soviet Union put an end to the ideological debate between market and plan. The balancing act between market and government failures under imperfect information is to be performed on a case by case basis. It cannot neglect history but it is also more and more determined by expectations. Expectations, in turn, include the tendency towards convergence so that they impose tighter and tighter constraints on inadequate policies.

Even though future generations are not represented in majority voting, greater awareness of the need to implement sustainable policies brings pressure on elected governments to clarify the intergenerational effects of current policies. This applies to the physical and cultural environment as well as to the provision of public goods and transfers through taxation. The awareness that excessive taxation, overt or hidden in the form of inflation, discourages saving and stifles growth is also rising. As growth prospects fall due to the absence of incentives to save and invest, so does employment, making future consumption lower and social deprivation higher. In due course these policies are bound to be corrected. Yet, without adequate institutions, there may be reversion into inadequate policies⁷.

One of the crucial debates in economic and social development is on how to ensure that the poorer countries grow more rapidly than the richer countries, so that there may be convergence in living standards and an increasing cohesion in the world economy. If "the rich get richer and the poor get poorer", the gap between rich and poor nations will tend to widen over time. Cohesion - be it global, regional or even national - will be threatened. Reforms will stall. In this debate, convergent countries form a club. Perhaps only countries with an adequate initial level of human capital endowments can take advantage of modern technology to enjoy the possibility of convergent growth. But Jeffrey Sachs and Andrew Warner (1995) suggest that looking at the initial level of human capital as the basis for long term growth potential is unduly pessimistic. Rather one should look at "reasonably efficient economic institutions" as the major requirement for economic growth and convergence.

Poor economic management stems from the absence of secure property rights, or from autarkic trade policies and inconvertible currencies. The failure to grow may be rooted in policies rather than in technology or human capital. Then the convergence club is better defined according to policy choices rather than initial levels of human capital.

⁷ The idea of reversible transition is developed in BET. See also note 22 below.

Moreover poor policy choices are not irrevocably linked to low levels of income. Sachs and Warner (1995) invoke a much quoted passage of Adam Smith in favor of this philosophy of a policy convergence club: “Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and tolerable administration of justice.”

Using a sample of 117 countries covering approximately 90% of the world population as of 1985 for which data on policy convergence are available, they establish that countries with “appropriate policies” display a strong tendency towards economic convergence, with the countries with the initially low per capita income growing more rapidly than the richer countries. Countries whose policies related to property rights and to integration of the economy in international trade are deemed not appropriate do not display any tendency towards convergence.

With the single exception of Haiti, every single developing country (<\$4,000 per capita income in 1970) with open trading system grew by at least 2% p.a. from 1970 to 1989! No case was found, therefore, to support the frequent worry that a country might “do the right things” in terms of overall policy (both politics and openness), and yet fail to grow.

Having established sufficiency, Sachs and Warner (1995) investigate necessity. Are there many countries that “broke the rules” and yet achieved high economic growth? Of the seven cases they found (Botswana, Cape Verde, China, Hungary, Lesotho, Thailand and China, or 9% of the non-qualifying countries), only China was seen as a “deep puzzle”⁸.

The results are summarized in the following matrix. Expressing the number of cases as fractions of the total we see that sufficiency is clearly established (3/4 vs. zero) but that necessity is less cogent, at least if the six exceptions besides China are considered. The results can also be interpreted in terms of conditional probabilities, using a Rawlsian “veil of ignorance”. If a poor country found itself back in 1970 knowing the numbers in the matrix but not the specifics of the country would policy makers gamble on a China type path? Conditional on closed policies, the probability of growing at 3% would be less than 10%, whereas conditional on good policies it would be greater than 80%.

	POLICIES		
	APPROPRIATE	NOT APPROPRIATE	TOT
GROWTH			
FAST	10	7	17
SLOW (<3%)	2	69	71
TOT	12	76	88

Source: Sachs and Warner (1995)

⁸ It is worth quoting their explanation: “It is indeed true that China has violated most of the rules: obscure property rights, political repression, high black market premia on the yuan, extensive reliance on trade quotas. Nonetheless, China has experienced a boom. We believe that China’s success is strongly related to its particular economic structure at the onset of its market reform at the end of the 1970s. In particular, China was a very poor economy in 1978, with three-fourth of the labor force in peasant farming. The essence of Deng Xiaoping’s reforms at the end of the 1970s was to free the peasant economy from state controls, even while maintaining the state’s grip on the non-peasant state-owned sector (which covered just 18% of the labor force).” Sachs and Warner (1995) go on to argue that this “two-track approach” was sufficient to unleash China’s growth and labor-intensive export boom but that it “could still be stopped by macroeconomic instability characteristic of many economies part way between planning and a market economy”.

The rejection of the reverse causation ("slow growth leads to bad policies") is trickier even for countries where the policy regime was chosen early in the postwar era before a track record on growth had occurred because outward oriented policies in the OECD also involved security relations led by the US. Similarly, reacting against these policies was an imposition of Soviet policy in Europe and elsewhere⁹.

The comparison of transition economies with developing economies in Latin America, East Asia and elsewhere has suggested that coping with a volatile international environment is the main difference between emerging markets and mature democracies. In addition, over the last few decades, especially since the oil crisis of 1973, mature democracies have clustered in three regions, the North America, Europe and Japan¹⁰. The response to crises is often more drastic at the periphery than at the center because of policy is supposed to have higher credibility in mature democracies with a higher credit rating and more transparent public and private partnerships. Lower ratings go together with less transparency, signaling to international investors the weaker financial reputation and the higher perceived risk.

A particularly troublesome implication of the Asian crisis, to which we return in Section 5 below, is that the difference between the reputation of center and periphery has shrunk due to the continuing difficulties of Japan. The increased uncertainty about emerging markets typical of the current global environment also reflects the absence of an active transatlantic economic dialogue, to the extent that this weakens further the chances of coordinated policy responses¹¹.

The requirement of a sustainable transition is therefore an environment where economic growth and investment do not threaten social cohesion. This explains why the objective of "ever closer union among the peoples of Europe" calls for converging European transitions, during which national ideas of Europe converge with each other as standards of living also converge.

This convergence does not rule out a specific timing and sequencing of reforms depending on the initial conditions and the capacity to transform. Indeed it may prevent a single path which might attain the terminal condition faster but could not be sustained thereafter. This is perhaps the most relevant lesson of the apparent demise of the Asian values, where economic efficiency was deemed independent of social cohesion and majority voting. While an appeal to European values may not be called for, converging transitions would seem to follow from the global environment and good government.

In other words, given a global environment favorable to growth, converging transitions impinge on policies in each and every one of the CEAS but also in each and every one of the member states. The current EU enlargement reflects this by supplementing the usual

⁹ The rejection of excessive taxation being based on a perceived threat to property rights or mobility assumes that the welfare state is an insurance contract entered voluntarily by risk averse individuals under the same Rawlsian "veil of ignorance" Ex-ante, the welfare state is actuarial, since no difference in individual risk has yet emerged. But pooling is impossible ex-post, when the risk has become a certainty. References in my introduction to UN 1997

¹⁰ For example the G7 summits have been organized along these lines and civil society associations like the Trilateral Commission too

¹¹ This was noted e.g. by the Trans-Atlantic Economic Dialogue, a new international forum coordinated by the Brookings Institution and CEPR which held its first meeting in Leesburg, VA on June 25-27, 1998

state by state accession procedures with group surveillance procedures issue by issue, which have been called *structured dialogue*.

2.2. Union Deepening and Widening

The 1992 EU Treaty listed criteria for EMU that constrained fiscal policies to fulfill certain criteria. With the agreement on the Stability Pact and the creation of the European Central Bank in July 1998, the conditions for a stability-oriented single monetary policy among the 11 states belonging to the Eurozone are likely to be met on time. Even when some EU currencies like sterling are still floating against the Euro, budgetary policies and procedures in all 15 EU member states will continue to be subject to tight multilateral surveillance. This will reduce the room for maneuver of national governments to for reforms designed to reduce the resort to the government budget in financing the welfare state.

The sequence of reforms involved is likely to be resisted by national electorates, making it harder for rival political parties to sustain the effort over the medium term. Nevertheless, these reforms are needed for European firms to remain competitive in global markets, especially in light of the depreciation of the yen and of several other Asian currencies. International financial markets and the rating agencies have shown to be sensitive not just to macroeconomic stability but also to the business climate and even the track record of reform.

This is where the observance of good government at national and union level becomes relevant. To see how it can be promoted, it is useful to derive from the basic values of European integration, the implication that, for the foreseeable future, the domain of most reforms will remain the democratically elected national governments.

The ability to balance efficiency and transparency in the decision process has determined European construction as a sequence of moves towards deepening and widening. Whatever the timing of such moves, efficiency gains have always been reinforced by the observance of three values, which may be called European even though their scope has been considerably wider, and notably includes the Americas. The three values are: proximity to the citizen (abbreviated as P), national legitimacy (abbreviated as L) and democratic accountability (abbreviated as A). The first value contains itself a double perspective. On the one hand, a higher entity must not take on functions that could be satisfactorily performed by a lower entity. On the other hand, when the lower entity is not capable by itself of performing the functions that satisfy its needs, it is helped by the higher entity. Thus, proximity and solidarity strengthen each other. For example, in the budget sphere, centralisation may be needed lest the spending bias of lower entities overwhelms the commitment technology available.

Having accomplished the first value, we should seek to reinforce majority rule at the national level. It is the starting point to ensure legitimacy at Community level. In union institutions all member states appoint representatives. National legitimacy is only guaranteed with the maintenance of the principle of equality of member states, which requires unanimity for Treaty revisions. From this fundamental principle of European construction, untouched since 1957, results the principle of non-exclusion: no member state can be excluded from participating in the process of union deepening. This

principle gives the nation-state a presumed advantage in satisfying proximity to the citizen.

On another plane, it may be said that the *structured dialogue* which goes alongside enlargement widens the principle of non exclusion to the point of giving the same expectation to each one of the CEAS.

Next to legitimacy, comes the value of democratic accountability. Accountable decision-makers are increasingly required at the union level, but are equally essential at the national level. Bureaucratic unaccountability and mixed institutional competences confuse public opinion. They may reflect deep-seated corporate governance problems, corruption or both, as discussed in Section 4 below. They display a negative image of Europe which its sceptics rapidly take advantage of. Everyone must know who has taken each decision and how they did it.

The simultaneous enlargement and deepening of the Union implies a permanent negotiation among nation states. As a result, a balance among proximity, legitimacy and accountability (P, L, A) helps implementing the principle of non-exclusion of a country that fulfills standards previously agreed by all members and that reveals the political will to belong in the core. While enlargement has always been unanimous, the *structured dialogue* with the CEAS suggests that the principle of non-exclusion may also be widening.

During the revision of the EU Treaty which is currently being ratified, there was a debate over the feasibility and desirability of flexible European integration¹². These have been observed in the EU Treaty, about both the single currency and the social charter. They can also be found in the eight-member Schengen agreement dealing with the free movement of people and set to interact with the cooperation in matters of justice and internal affairs. In other words, it may be similarly useful to distinguish several groups of countries within an enlarging EU. The Nordic countries provide one illustration as do the members of the CEAS with which the *structured dialogue* procedures have been in place for about four years. These procedures are supposed to prepare accession negotiations - always a bilateral process between the applicant and the union - in a multilateral framework. They show that flexibility can have a positive effect on the need to combine union deepening and widening. This is reinforced by the Central European Free Trade Association (CEFTA), which, in one form or another, has been in existence since 1992.

The method of European construction fostering international interdependence by cooperation among all levels of government, instead of defensive measures involving some form of protection against foreign competition, is based on peer pressure but the threat of sanctions is also contained in the 1996 Stability Pact.

2.3. Regional Integration

The increasing integration of several countries into key international institutions has been one of the most important signs of progress in political and economic transition¹³. The Czech Republic, Hungary and Poland (with Slovakia, all founding members of

¹² This type of integration was discussed by the Portuguese parliament as I describe in my 1995. See also CEPR 1996. This multilateral surveillance can be interpreted along Rawlsian "veil of ignorance" lines to the extent that it is based on the principle of non-exclusion as I show in my introduction to UN 1997. See note 10 above.

¹³ This is discussed in the 1997 **Transition Report** of the EBRD

CEFTA) have already joined OECD and received additional confirmation of their progress through the invitation to join NATO in 1999.

The EU decision at the Luxembourg summit of December 1997 to accord priority in membership negotiations to the same three plus Slovenia (who joined CEFTA in 1996) and Estonia confirmed that these countries are multi-party democracies and market-oriented economies. Among the remaining, so-called pre-in countries, Romania joined in 1997. Latvia and Lithuania share with Estonia membership a number of Baltic organizations, which does not preclude CEFTA membership either.

An enlarged EU will represent an event of outstanding significance for Europe as a whole and a landmark in the process of transition. The scale and scope of the challenges in meeting the conditions for accession to the EU, particularly in the areas of environment, health and safety standards for products and processes as well as the financial sector, are becoming more clearly defined. The requirements of membership embody a large number of very detailed and demanding obligations. Some of these require the strengthening and adjustment of public institutions, for instance regarding the regulation of product standards or of competition. Others will have strong implications, particularly for infrastructure, enterprises and financial institutions. In infrastructure, there will be emphasis on integrating transport and communication systems to ensure the smooth functioning of the single market.

For enterprises, EU rules for health and safety of processes in the workplace and environmental standards will be of particular significance, with major implications for restructuring and investment.

Accession will imply that enterprises must conform with the stringent standards of the EU on the safety of products. Investment requirements for municipal services (such as the treatment of waste and water), for power generation and for heavy industries (emission standards) would appear to be especially large.

Financial institutions will be expected to perform to higher standards of financial strength and transparency than at present. They will have to demonstrate that they are well-regulated by government while at the same time showing independence in their allocation of credits.

Financial systems are also expected to play a greater role in funding small and medium-sized enterprises than they do at present as they are an important factor in stimulating innovation, competition and growth.

The openness of the single market is amplified by the move to EMU. The Euro will play a major role in fostering trade relations across the continent and world-wide, as a means of international payment and as a foreign exchange reserve. The recent decision of Greece to join the Exchange Rate Mechanism (ERM) was seen as a step towards joining the EMU in future. Advanced transition countries share this awareness that the ERM code of conduct will help associated countries earn policy credibility just like it did to Ireland, Spain, Portugal, Italy and Finland in the past.

EMU may also enhance the attractiveness of the CEAS relative to Russia, Ukraine and smaller open economies in the CIS like Belarus and Moldova that have common borders (Latvia, Lithuania, Poland and Romania), because these will in time border the EU itself.

Countries in the Caucasus (Armenia, Azerbaijan, Georgia) are instead betting on their being points of passage between Europe, Turkey, the Middle East and Central Asia.

Georgia, it is said, wants to model its development policy after Chile's. Now Chile, a strong reformer for the last two decades, has been orienting its trade and investment to the Pacific basin and was hoping to become a member of NAFTA. In the wake of the Asian crisis its prospects have deteriorated and it is now willing to be part of Mercosul, where the Atlantic dimension has so far dominated. Similarly, one of the distinguishing features of within CEAS is the membership in CEFTA, which roughly coincides with the "fast track" accession (the two exceptions are Estonia, fast track but not in CEFTA, and Slovakia, CEFTA but not fast track).

Difficulties in policy coordination across the Atlantic and the lack of Japanese regional leadership during the Asian crisis were already noted. Of course coordination difficulties have been prominent within the EU, and may have prevented the CEAS to go further in their own coordination efforts. CEFTA, which now includes six CEAS, and might widen further to include Bulgaria and the three Baltic states, remains one of the distinguishing features in the transition countries. In effect, integration among CIS states has stalled. No committee to resolve conflicts within or between members states exists. Some states object to efforts to vest the CIS with the authority to take binding administrative measures and emphasise instead the purely consultative role of the institution. Progress on the creation of a customs union between Belarus, Kazakhstan, Kyrgyzstan and Russia, as well as a separate federation between Belarus and Russia has also been slow.

2.4. The Effect on Investment

Hans Peter Lankes and Anthony Venables (1996) stress that the effect on growth and investment applies across the board because its focus is on their attractiveness to foreign direct investment projects rather than on their association to the EU - or lack thereof. In spite of the heterogeneity of the projects in terms of size, function, technology, location and control mode, some patterns emerge. The main ones pertain to function and control mode.

The function may be predominantly market access motive (being close to consumers) or predominantly cost motive (being at a low cost production). Projects in distribution or local supply are more concerned with access than export oriented projects, which in turn tend to be more closely integrated in the activities of the firm, and somewhat more upstream. The control mode is also relevant as licensing or joint venture projects differ from establishing a fully owned subsidiary. The choice depends on the need to gain access to local contacts and information about markets as compared to the need to safeguard technology and product quality. Wholly owned projects tend to be both more export oriented and have more of their output transferred within the firm.

Countries with perceived political stability and low perceived risk levels are not only more likely to receive larger flows of foreign direct investment but also less likely to have projects postponed or abandoned. The greater security of supply makes these countries more likely to have projects that are relatively export oriented and that are integrated in the sales orientation of the firm.

This also makes such projects more likely to bring with them the benefits of technology transfer, quality control and the development of marketing channels. They certainly

seem to be more in line with the comparative advantage of the host economy. The implication of the analysis by Lankes and Venables (1996) is that the progress in the transition will be as if not more important than the proximity to EU markets in determining the flow of foreign direct investment and the type of this investment.

Given the Russian crisis of the Summer of 1998 and the fact that reforms have stalled in some of the CIS countries makes EU enlargement the only expected development in Eurasia which embodies open market and free trade policies aside from the ongoing process of CIS countries joining the WTO. Of course, open policies in relation to these countries are not only vital for the advancement of their transition but also for the development of the EU economy itself, its growth potential and the welfare of its consumers¹⁴.

3. Sustainability of Macroeconomic Policies

Global financial markets call for accelerated macroeconomic stabilisation. Nevertheless, the legacy of the old regime must also be taken into account: when there is no private sector, monetary policy is simply the provision of finance for public investment. Essentially fiscal and monetary policies are the same thing.

As the transition unfolds, privatisation creates a private sector and the distinction acquires macroeconomic significance. Fiscal policy gradually emerges as the concepts of public expenditure, tax revenues, government budget, and public debt become operational. With the creation of a central bank, and the withdrawal of the central bank from automatic financing of the budget deficit, monetary policy emerges as the provision of credit to the private sector. During the transition, the countries are expected to introduce market-oriented policy-making institutions in which the distinction between fiscal and monetary policy is clear, and the use of these policies in maintaining internal and external balance can be analyzed in the usual fashion.

These national economies do face an external constraint along the entire transition path. Their foreign debt cannot become so large that international financial markets perceive that they cannot service it. Their export earnings must be sufficient to finance imports and debt service as the economy becomes increasingly marketized. Therefore, signs of internal imbalance, either excessive budget deficits or unacceptably high inflation, may be taken as indicators that a currently satisfactory external situation could become unsatisfactory in the future, as the internal imbalance spills over to the external sector.

3.2. A Macroeconomic Framework

The problem of how to evaluate macroeconomic policies and, possibly, recommend policy changes, without a quantitative macroeconomic model has come up in the course of the evaluation of World Bank structural adjustment programs. A framework that combines a model of policy assignment and debt sustainability criteria can deal with the problem¹⁵. A version of this framework seems useful for analyzing the macro policies of CEAS with reference to something like a convergence program to macroeconomic stability and a catalog of structural measures designed to remove the macroeconomic and

¹⁴ As mentioned in note 3 above, the so-called Euro holdup problem suggests that the reforms needed for the success of the EMU may not materialize.

¹⁵ The text follows Branson, de Macedo and von Hagen (1998)

microeconomic obstacles to growth.

Development of a quantitative model is precluded both because the structure of the CEAS is changing rapidly, and because of the lack of sufficient data. Instead, the model of external and internal balance with high capital mobility and a fixed real exchange rate that assigns fiscal policy to internal balance and monetary policy to external balance can be used. The instruments for stabilization are the MAFAS and a well-defined exchange rate regime. In their approach to external balance, the CEAS should adopt a Pre-Pegging Exchange Rate Regime (PPERR) that entails essentially no active nominal devaluation aimed at real devaluation as the country converges toward EU membership¹⁶. In their approach to internal balance, the CEAS should adopt a MAFAS. Both of these policy paths are meant to bring the economies to the point of accession to the EU along as smooth a convergence path as possible. In general, PPERR and MAFAS would be forms of credible policy that stabilize the economy as it enters the world market. The PPERR avoids the "inconsistent trio" of fixed exchange rate, free capital movements, and independent monetary policy by freeing monetary policy to be targeted on external balance, represented by a suitable reserve position. The MAFAS then sets fiscal policy to maintain internal balance, as represented by a low rate of inflation. The arithmetic of debt sustainability can be used to determine the appropriate primary deficit that is consistent with a non-growing ratio of debt to output. Thus the fiscal adjustment can be consistent with low inflation and a non-growing debt ratio.

The commitment of the CEAS to eventual EU membership gives them clear terminal conditions, including either a fixed nominal exchange rate or joining a single currency. Thus while an early devaluation in order to establish external balance may be necessary, at some point along the path they will adopt the PPERR, limiting the movement of the exchange rate by following the "ERM code of conduct". The introduction of PPERR also requires a successful move to full currency convertibility, a part of the code of conduct which took ten years to achieve and was followed by the crises of 1992-93¹⁷.

The extent to which movements of target variables and instruments correspond as expected since the beginning of the transition could be taken as a test of how far along they are in the transition. Which countries are close to the point at which they can adopt MAFAS and PPERR, and which may require front-loaded structural adjustment, in the form of deficit reduction procedures or real devaluation, before adopting MAFAS and PPERR?

Ask first if the economy is in external balance, both in terms of the current stock of foreign debt, and in terms of the current flow in the current account deficit. Then ask if the fiscal position seems consistent with internal balance, taking a large fiscal deficit as an indicator that a current state of external balance may be threatened in the future.

For external balance, check whether net exports of goods and non-factor services, as the flow measure, corresponds to the real effective exchange rate as expected. In particular, does the trend in net exports suggest the need for a real devaluation prior to adopting a

¹⁶ Drabek and Brada (1998) caution that a premature PPERR has implied unstable trade policies in some of the CEAS. Membership in CEFTA goes the other way but is may not have been enough of a stabilizer.

¹⁷ This is discussed in my 1997b. The conditions for capital account liberalization have been the subject of much debate since the onslaught of the Asian crisis. The recent decision of Chile to relax its controls on inflows has been especially controversial since these controls were seen as very effective. See Cordella (1998), De Gregorio (1998) and my 1998.

PPER? In assessing the trend in net exports, also look at the dynamics of foreign debt. If the current ratio of foreign debt to exports is not increasing, then the country is likely to be able to sustain the debt path in the absence of structural change with negative consequences for the current account.

As a measure of internal balance, look to the inflation rate, with the budget deficit as the corresponding policy instrument. The aggregate budget deficit is a necessary, but not sufficient indicator for internal balance, for institutional, measurement and structural reasons.

3.3. A Policy Matrix

A policy matrix such as the one presented can be used in the assessment of the sustainability of the transition. Across the top we ask is external balance sustainable, and have the answers "Yes" and "No" defining the two columns. Down the side we ask is internal balance sustainable, with the answers (Y and N) defining the two rows.

We put external balance across the top to signify that we have a clearer view of that than of internal balance. The main importance of the internal balance indicators are to suggest that countries in the lower off-diagonal box are likely to slide to the right if internal balance is not achieved. It also seems likely that it is easier to move down in the matrix, with internal balance threatened by inefficient budgetary considerations and political pressures than it is to move up.

Countries in the upper diagonal box are already on or close to a convergence trajectory toward accession to the EU in terms of both external and internal balance, and are in a position to adopt MAFAS and PPER. Countries in the lower diagonal box are out of balance on both dimensions, and are candidates for an EU loan or an IMF/World Bank structural adjustment program to get close enough to the trajectory to consider MAFAS and PPER.

Is External Balance Sustainable?

		YES		NO	
					MAFAS? +REAL DEVALUATION
Is Internal balance sustainable?	YES		<i>success</i> MAFAS +PPER		
	NO		PPER? +EXCESSIVE DEFICIT PROCEDURE	<i>failure</i>	EU LOAN/ IMF WB ADJUSTMENT PROGRAM

Source: Branson, de Macedo and von Hagen (1998)

Countries on the off-diagonal boxes in the policy matrix are in balance on one front but out of balance on the other, with some discrete adjustment needed to get close to the convergence trajectory. Countries in the upper off-diagonal box may require a discrete real devaluation to restore external balance before adopting PPER¹⁸. They may want to adopt a form of MAFAS that creates the resource freedom to ensure that the devaluation has the intended effect. Countries in the lower diagonal box may require a front-loaded

¹⁸ This is consistent with the findings of Drabek and Brada (1998). See note 17 above.

application of a kind of "excessive deficit procedure" (as called for by the EU Treaty and the Stability Pact for member states) as part of their MAFAS. Their PPERR may allow for some real appreciation as the excessive deficit procedure takes hold. Successful adjustment in either off-diagonal box moves the country to the upper diagonal box, close enough to the convergence trajectory to sustain MAFAS and PPERR.

Failed adjustment leads to the lower diagonal box and the need for an adjustment program with outside assistance and conditionality. Based on the latest available data on current account and government balance, it would seem that Slovenia is the only one in the top diagonal box, whereas Estonia, Slovakia, Lithuania and Romania would fit in the lower diagonal box. The Czech and Latvian cases would seem to be in the upper off-diagonal box and Bulgaria, Poland and Hungary in the lower off-diagonal box. Looking at foreign debt and inflation performance as further evidence of sustainability would improve the Czech, Latvian and Polish cases, move Lithuania to left and Slovakia up. The accompanying matrix illustrates the pattern, where the question marks underscore whether it is the sustainability of internal or external balance (respectively IB and XB) that seems most vulnerable.

	SUSTAIN	EXTERNAL	BALANCE
SUSTAIN		YES	NO
INTERNAL	YES	SLOVENIA, POLAND (IB?), CZECH REP (XB?), LATVIA (XB?)	SLOVAKIA (IB?)
BALANCE	NO	HUNGARY, BULGARIA, LITHUANIA (XB?)	ESTONIA, ROMANIA

3. 4. Structural Reforms

The emphasis on policy making institutions reflects the realisation that governance problems can distort the development of human capital, damage the structure of emerging organisations, and shape the evolution of linkages between government and business with potentially long-term and severe consequences for the path of the transition and the type of economy and society to which it will lead. These various considerations underlie indicators such as those that have been developed by the EBRD and have appeared in the **Transition Reports** since 1994¹⁹. The assessment of the sustainability of the transition by means of the policy matrix must therefore be supplemented by the credibility of the program of structural reforms.

Fiscal consolidation will involve major structural changes in the budget. Aside from further improvements in the tax system, measures are likely to be taken on the expenditure side. An example is the very high level of publicly-provided pensions, with liberal provisions for retirement. In several of the CEAS, the flow of public pension payments is well above 10 percent of GDP. Using a discount rate of 10 percent to capitalize this stream, pension debt is 100 percent of GDP. Thus something structural is

¹⁹ Six indicators are calculated and divided into the categories of enterprise reform (three series: large scale privatization, small scale privatization and enterprise restructuring), market and trade reform (two series: price and trade and foreign exchange liberalization) and banking reform. In 1995, three new series were added, "competition policy" and "capital markets". The indicators assume a rating of 4* for most mature democracies. The variation over time and across countries is of course much greater in the CIS than in the CEAS.

likely to be done about pensions, as well as many other fiscal issues. Fiscal consolidation may in turn require some form of social contract to be effective, and it will change the future fiscal position.

In a situation in which the public-private distinction is still emerging, there are conceptual and practical problems in measuring the public deficit, and even worse, the public debt. There is a substantial overlap between monetary and fiscal policy, as much of credit creation finances public sector activity early in the transition. Thus in the early stages net domestic credit creation may be the best measure of fiscal policy, rather than the budget deficit. Unfortunately, data on credit creation are only available since the beginning of the transition, so it is difficult to make any comparisons across the beginning. As the private sector and central bank develop, the focus will shift to the budget deficit as the measure of fiscal policy. It would be good to have a measure of the weight of the private sector in the economy as a way of weighting the two measures.

The lack of clear distinction between private and public sectors and the lack of data make it impossible to assess public debt sustainability. The existence of substantial arrears among public enterprises, the financial system, and the government, with gross debt probably much greater than the net debt, make assignment of debt to sectors conceptually difficult, even if we had the data. The existence of unmeasured future claims on the government, such as the pension problem, mentioned earlier, add to the conceptual difficulty²⁰. The CEAS are developing countries with changing structures, so the MAFAS and PPERR must be flexible enough to accommodate structural change. They are also in a sense competing with each other not to fall behind on the path to accession, and choosing whether it is in their interest to further coordination among themselves or rather to avoid fall into the next round of applicants.

The fraction of output which comes, or should be expected, from the private sector is a rough indicator of transition but the real issue is one of establishing partnerships between the public and private sectors. These partnerships should build on the comparative advantages of the public and private sectors. They will take different forms in different areas where the government is likely to be involved in a fundamental way, including particularly health, education, pensions and infrastructure. These areas underline the importance of developing and maintaining the right kind of partnership. In particular, public-private partnership should never be confused with collusion between special private sector interests and the government to the detriment of the public at large (so-called *crony capitalism*). It is crucial for the government to lead by example in promoting – in both the public and private sectors – the behaviour that is consistent with a well-functioning market economy.

4. Governance and Growth

Good governance involves establishing government institutions that allow markets to work well and to deliver and protect living standards and the rights of its people. In the last instance, it depends on the establishment and functioning of institutions that are

²⁰ Perhaps the CEAS governments have a good opportunity for the introduction of a system of generational accounting as their budget processes emerge. See Auerbach and Kotlikoff (forthcoming).

neither governmental nor private enterprise, such as political parties, voluntary organisations, religious groupings, labour unions and the media, known as civil society. Under the old regime, such institutions were focused narrowly on the interests of those in power, and civil society was stunted.

Institutional arrangements for credible fiscal policy-making based on the strategic dominance of the Minister of Finance over spending ministries are conducive to stable public finances. They are another indicator that the newly established institutions of the market require the reform of the administration of government if they are to flourish. The independence of the central bank is a signal of the government's commitment to eschew the inflation tax to which international financial markets give a high visibility. Central bank independence is therefore equated with the government's commitment to fiscal consolidation and its desire to achieve a good financial reputation.

The growth and flourishing of civil society have been impaired when social problems are exacerbated by the change in economic regime. In many transition countries, falling incomes, dislocation of employment and reduced or badly directed social transfers have led to increased poverty. Along with rising poverty have come increases in health problems and social maladies, including dramatic increases in deaths from heart disease, higher suicide rates, and the spread of infectious diseases. The deterioration in the provision of public health services and higher stress may also explain the drop in life expectancy which has been observed. These circumstances are of course familiar from developing countries. Observing them during the transition may generate expectations of reversion that prove self-fulfilling, especially if the emerging markets crisis continues to spread ²¹.

4.1. The Budget Process

A basic problem in all transition economies is to achieve effective control over the government budget²². Since the transition is from a state of central planning and strong involvement of the government in the production sector, achieving control over the budget is connected with the problem of reducing and restructuring government expenditures and strengthening the government's system of tax revenues. This means that fiscal reform necessarily involves major distributional conflict. Economic analysis predicts that distributional conflicts jeopardize reform programs, as the fight between differing groups within society over the allocation of the reform's costs and benefits leads to postponement and to solutions of reciprocity, i.e., political outcomes that hold some good for everyone, but an inefficient outcome for society.

Institutional structures can help avoid such inefficiencies. Of course, institutions do not make the distributional conflicts disappear. However, by defining the rules of the game they structure the ways in which the opposing parties can present and defend their claims. Institutional rules divide decision-making processes into individual steps and determine which steps are taken when they assign roles and responsibilities to the various actors, and, by regulating the flow of information, they distribute strategic influence and create or destroy opportunities for collusion. A basic claim of political economy is that institutional rules have systematic effects on the outcome of the decision making processes they govern.

²¹ The idea of reversible transition is developed in BET

²² The approach is described in Branson, de Macedo and von Hagen (1998) which is followed in the text.

The budget process is the set of institutional rules relevant in the context of budgetary policies and, therefore, in the context of fiscal reform. Formally, the budget is a list of revenues and expenses conveying what the government expects and is authorized to do during a certain time period. The budget process, in the broadest sense, is a system of rules, both formal and informal, governing the decision making process that leads to the formulation of a budget by the executive, its passage through the legislature, and its implementation. To assure the stability, consistency, and efficiency of the government's financial policy, the budget process should be the principal and effective locus of conflict resolution between competing claims on public resources. Informal decision-making and agreements outside the budget process, "non-decisions" (i.e., the lack of nodes of deliberate decisions in the process), and the use of off-budget funds are all sources of failure of the budget process.

The stark differences in fiscal performance among the EU governments can be explained to a large extent by differences in budgetary institutions²³. The decentralization of the budget process, i.e., the degree to which geographical, sectoral or other special interests dominate over the common interest of the government in budgetary decisions, as the main cause of weak fiscal discipline. Specifically, they show that countries with a low degree of centralization of the budget process have systematically higher ratios of public spending, and deficits and debts, to output than countries with large degrees of centralization. Countries with a centralized budget process are able to achieve a higher degree of macroeconomic stabilization and are less prone to credit-rationing. All this evidence suggests that appropriate design of the government budget process can be an important element of a fiscal strategy aiming and fiscal stabilization. Reform of the budget process would thus be critical in a macroeconomic reform strategy.

4.2. Taxation

A part of the budgetary process, taxation is an even more prominent example of government activity where good governance is crucial for the functioning of a market economy²⁴. Raising revenue is, of course, fundamental for macroeconomic stability and the provision of basic services and social protection. Under the old regime, the taxation system was not of over-riding importance since the government could command resources directly. In a market economy most of the resources used by government must be raised in some shape or form from the private economy. The challenge is to do this in a way that keeps distortions and disincentives to a minimum and takes account of the taxpayers' ability to pay. There is no area where the interactions of institutions, policies and behaviour are more important.

Taxation is one of the biggest problems facing foreign investors in a number of transition countries. If taxation is to operate in a way that allows private enterprises to function effectively, it should be even-handed, predictable and based on reasonable definitions of

²³ The importance of individual elements of the budget process, such as veto powers or committee structures, for fiscal performance has long been studied empirically in the context of American state governments. Only recently an emerging literature considers the impact of the budget process on the fiscal performance of national governments on an international scale. In contrast to the American literature, this new approach, pioneered by Jurgen von Hagen, is based on comprehensive characterizations of the budget process, summarized in numerical indices describing the quality of a process.

²⁴ This is discussed in the 1994 **Transition Report** of the EBRD

profit, output or income. In practice, this is not so and the result is widespread discretion by both ministers and revenue officers and a plethora of special deals and exemptions. This in turn results in a shredding or demolition of the tax base, still higher rates on those who do pay, large distortions of competition and the allocation of entrepreneurial energies (or covert payments) to securing special privileges.

Investment, be it foreign or domestic, does not need special deals, discretionary or otherwise, and governments should not see the promotion of investment as lying in tax privileges. The main factors stimulating investment in a market economy are the stability, transparency and predictability of markets and the prospects for growth. Investment and growth will be fostered, therefore, both by the transition itself and by macroeconomic stability.

What is required from the tax system is predictability, simplicity and a broad base, taking into account sensible economic concepts such as enterprise profit or value added. Such a structure allows the reasonable rates which are required to strike a balance between revenue and disincentives. The establishment of an effective tax system is central to good governance.

4.3. Fighting Corruption

It is now generally acknowledged, and with hindsight easy to understand, that the first stages of privatisation led to a rough and often violent struggle for the appropriation of assets being divested by the state. Even when this consisted of a democratic distribution of vouchers, there still remained thereafter the process of shaking down these shares holdings into structures of control. Corruption and bribery, already deeply entrenched in the planning culture, took a new lease of life with the transition to market economy.

Data assembled from opinion polls of businessmen are published for many countries as corruption perceptions indices. Even though the international comparability of the numbers must be very limited, they correlate well with the credit ratings. There is a kind of virtually corruption free group which only includes AAA rated countries and the equivalent of a "speculative" group which includes Russia but also Mexico or Turkey.

There are only four CEAS for which the corruption perception index produced by **Transparency International** is available. This has a scale of one to ten and can therefore be easily compared with the rating on the same scale presented by **Euromoney**²⁵. The comparative results are in the accompanying table.

It is not enough to understand and somehow measure and compare corruption across countries. Fighting it must be part of the reform strategy. In other words, the government itself must look for institutions, policies and actions that minimise the opportunities for arbitrary, self-interested or corrupt bureaucratic interference.

²⁵ The ratings were taken from Dornbusch and Giavazzi 1998

COUNTRY	CORRUPTION	RATING
CZECH R	5.2	6.3
HUNGARY	5.2	4.4
POLAND	5.1	4.6
ROMANIA	3.4	2.6

Source: Transparency International and Euromoney

There is much that sound institutional and policy design can achieve in promoting responsible behaviour and limiting corrupt practices. Government structures should, as far as possible, limit the number of licences and permissions required and the discretion of civil servants over the ordinary economic activity of entrepreneurs and consumers.

It is when permissions or discretionary decisions start to permeate throughout the economy and society that bureaucratic interference develops and the potential for corruption grows. This results in markets that do not function well and where entrepreneurship, investment and growth are inhibited. Where permissions or discretion are unavoidable, as they will be in a number of important areas of activity, openness and transparency will guard against the misuse of power.

Organised crime and protection rackets also pose serious problems for business transactions. With the heavy "tax burdens" of organised crime, investment is driven away - towards more law-abiding societies.

4.5. Enterprise Performance and Sound Business Practices

Growth through innovation, driven by opportunity and competition, carries the strongest lessons for the transition countries. It is not simply technology that changes output, but the whole method of work in terms of market-driven methods of organisation and production.

Restructuring investment will thus come from the process of competition, but real competition must be underpinned by hard budget constraints. A company facing competition without privileged access to special funding will be forced to change and adapt if it is to survive. The speed, effectiveness and social and economic costs of that adaptation will, of course, depend on how the processes of competition and finance function. These in turn will be closely influenced by the policies, institutions and behaviour which develop during the transition.

The balance across sectors has already shifted towards the structure of comparable middle-income countries, with a move from the over-sized manufacturing sector towards services which were neglected under the old regime.

At the level of the individual firm, competition and hard budget constraints have a powerful influence on performance, particularly where these are combined with effective

corporate governance and limitation of bureaucratic interference. Where budget constraints have remained softer, enterprise adjustment has lagged.

Sound practices are in the long-term interests of an enterprise devoted to the profits of its shareholders. They may be expressed in terms of those practices that maintain and develop good and honest relationships with customers, suppliers, workers, those who supply finance, neighbours, local and central government, and anyone else who interacts with the enterprise. Indeed, the only effective method of long-term profit maximisation is the implementation of these practices and that a stable and predictable business environment encourages and rewards this long-term perspective.

Recent years have shown great interest in codes of sound business practices, often specified in terms of checklists which should be followed. While the precise form of codes may be the subject of argument, the broad principle of maintaining and developing good and honest relationships with those interacting with enterprises is broadly accepted²⁶.

5. Crisis Management

There were three waves of financial crises in the 1990s, the last one of which is still on²⁷. The first wave broke in September 1992 over the ERM and was solved one year later, after the fluctuation bands were widened. The second wave followed from the attack on the Mexican peso in December 1994 and had ripple effects in 1995 in both South America and Central Europe.

The third began in Spring 1997 with a minor attack on the Czech *koruna* resulted in its devaluation. However, the Thai baht floated in the Summer of 1997, reversing an implicit dollar peg which had been pervasive in the fast growing East Asian economies, and Malaysia, Indonesia and Philippines also experienced attacks on their currencies. Perceptions of financial crisis began to form.

Currency and banking crises spread to other Asian economies in the Fall, threatening the role of Hong Kong as a financial center ruled by, but separate from, China. The Republic of Korea, like the Czech a recent member of the OECD, suffered a combined currency, banking and debt crisis. Japan, a mature democracy and a prominent member of the G-7, was seen as part of the problem. China, whose transition to market and to democracy has yet to begin, was seen as capable of keeping financial stability in the region.

The prevailing perception was of an emerging markets crisis which hurt the borrowing capacity of Asian, Latin American and Central European debtors. The continued weakness of the Japanese currency exacerbated the negative impact of the financial turmoil on Asian growth throughout the Spring of 1998. South Africa followed while Russia floated the rouble and defaulted on its debt in late August²⁸.

Among the large emerging markets, only Egypt seems to have escaped a speculative

²⁶ The guidelines on *Sound business standards and corporate practices* promoted by the EBRD are the most influential but work by Daniel Kaufman at the World Bank, and initiatives at the OECD, the UN and WTO may also be emphasized.

²⁷ This section adapts my 1998.

²⁸ Brinkman 1998 deals with the attack on the rouble in Spring and Summer 1998 and compares it to the 1996 episode. Belanger 1998 shows the deteriorating situation in Russia. See also Dornbusch 1998c.

attack on its currency whereas Brazil has so far succeeded in keeping its dollar peg. The fear is that this emerging markets crisis will spread from the Pacific to the Atlantic and hurt growth prospects in the EU and the US.

As mentioned at the outset, almost all but a dozen mature democracies qualify as emerging market economies, so that the notion hides a lot of different national and regional circumstances²⁹. If the notion of emerging market encompasses too many varieties, that of financial crisis is often misused. The term applies best to a combination of currency, banking and sovereign debt crisis with strong negative effect on the national economy³⁰.

With the definitions of emerging markets and financial crisis in mind, we turn to the appropriate level of policy response, which may still be national, regional or global, depending both on contagion mechanism and on the availability of instruments and institutions.

Contagion patterns are not well understood, but geography and hegemony seem to play a role³¹. Both are at work, for example, when it comes to the economic policy autonomy of Hong-Kong relative to China - neither a market nor a transition economy or to the role of Japan - not an emerging market and yet it is part of the Asian problem, rather than helping solve it³².

The recent turmoil in Russia has a strong domestic component and threatens to reverse the transition process. The sequels of a debt moratorium and of currency inconvertibility, let alone a bank run, will remain economically and politically hazardous for some time to come, especially due to the lack of a North Atlantic economic dialogue. The informal apportionment of responses to financial crises emerging markets to the major mature democracy in the same continent suggests a pattern of contagion reminiscent of "the Monroe doctrine" and probably inadequate in today's global markets. Nevertheless, possible effects in Brazil, or in Latin America, would no doubt be seen as primarily calling for a US response. Instead, given Russia's status as former hegemony in Europe and parts of Asia, perceptions of crisis elicit stronger responses by the US and by the EU, hopefully in a coordinated fashion.

The so-called architecture debate features a reform of the system of international relations and its main institutions, which for the most part were established half a century ago. The reflection of regional cooperation arrangements such as the EU is one of the issues in the debate where the geographic/hegemonic pattern of contagion matters. The role of Japan acquires special salience because it was seen as the major player in South-East Asia, where the current crisis originated. Now reforms of the international system have been resisted by the G-7 and by its members in the EU but they may now have a better chance if they are not overly grandiose. One reason is that markets' resistance to change is lower in times of crisis.

²⁹ Even among Thailand, Malaysia, Indonesia and Korea as documented in Ito 1998. While China does not qualify as emerging market, Dornbush 1998b asks whether it is next in line for a devaluation, an option we strongly reject.

³⁰ This is the definition proposed in Portes 1998

³¹ Krugman has popularized the superstar model in connection with income distribution within professions. It may also apply to crisis contagion.

³² Krugman 1997b emphasizes this point

5.1. Economists' Controversies

The main source of debate among economists hinges on the role given to fundamentals vs. financial panic. Because both are probably at work, interpretations often depend on a balancing of each factor³³.

If structural problems and policy inconsistencies make it inevitable that a combination of currency, banking and debt crises will lead to a financial crisis with severe real consequences for the national economy, then the root causes must be addressed, at the risk of encouraging moral hazard behavior³⁴

But because crises are cumulative processes, which have a self-fulfilling character, their costs end up being much greater than called for by the fundamentals. Then prevention efforts make sense almost always.

One way to solve the debate between the two camps is to look for areas of agreement in what are causes of a financial crisis. The **list of favorite causes** still leaves a great deal of room for interpretation but it helps focus on the disagreement³⁵.

That bad shocks and policy mistakes make things worse is uncontroversial but the practical question is rather how the severity and duration of the bad shock and the irreversibility of the policy mistake make a difference to the perception of crisis. The attack on the Czech *koruna*, for example, was short-lived because devaluation was coupled with a temporary import deposit and measures to deal with the fragility of some of the financial institutions³⁶.

Financial fragility is seen as decisive in the combination of currency, banking and debt crisis. In that context, the maturity of capital inflows matters more than their size, because financial fragility comes from failures in the maturity transformation of short-term assets into long-term liabilities banks are suppose to provide.

Another uncontroversial point is that financial liberalization and banking deregulation require improved prudential supervision, the question being how to achieve this supervision in global markets. In particular, does this require a new institution? Instead, can the BIS and the IMF substitute for the role of an international lender of last resort? The architecture debate continues on this issue.

There is again consensus on the statement that large and free foreign exchange reserves, and/or a flexible exchange regime reduce the probability of a crisis. Yet it may not be possible to agree on what finite level of free foreign exchange reserves and exchange

³³ Krugman 1997a describes the "canonical model" of currency crises and adds in closing "But everyone agrees that a sufficiently credible currency will never be attacked, and a sufficiently incredible one will always come under fire." See also Krugman 1997b

³⁴ The interview to the US Treasury Secretary in the *New York Times Magazine* of 19 July used the word often.

³⁵ The discussion by Perotti or Velasco 1998 included a list followed in the text

³⁶ Drabek and Brada 1998 claim that the Czech peg lasted too long and led to an unstable trade policy. They also point out that before the crisis most economists viewed the currency experience favorably. Another cost of this policy was that capital account liberalization was conducted to alleviate exchange rate pressure even when it aggravated problems of corporate governance. This pattern is reminiscent of the recent relaxation of the import deposits in Chile. See references in note 17 below.

rate flexibility averts a crisis.

The state of the architecture debate is that an international lender of last resort helps if it does not exacerbate moral hazard. For fundamentalists this is a bigger "if" than for those who hold that crises are self-fulfilling. Finally, both sides agree that a crisis always has a combination of causes.

A financial crisis comes in many forms - because it combines a currency collapse, with or without resort to exchange controls, a bank run or the threat thereof and a debt default or moratorium.

Its **anatomy** often includes the expected bailout of private debts by the state, or by international institutions. Such expectations are easier to form in the presence of cronyism and with weak corporate governance, as emphasized in the previous section.

The converse of the previous point, that financial liberalization and banking deregulation require improved prudential supervision, is that capital account liberalization without improved banking supervision is also found in most crises. Over-investment is the mechanism through which the combination results in banking and currency crises³⁷.

Even in countries with high savings ratios, over-investment generates large current account deficits and real appreciation. If these deficits are financed by short term foreign currency unhedged liabilities and by the ever greening of bad loans, it is tantamount to making private debt into an implicit public debt.

Once the issue of anatomy is clarified, the **geography** of a crisis depends on the pattern of contagion. Suppose a financial crisis is going to occur in country X; will it spread and if so how³⁸? In the emerging markets crisis, the spread is global, from Singapore to Chile or to Egypt.

But lessons can be learned from cases when the scope is regional, as in the ERM crises of 1992-93. At that time, Portugal and Ireland suffered currency attacks based on what was happening to the Spanish and British currencies, in what was described as "geographic fundamentals".

These attacks were short-lived but they nevertheless led Ireland to request a realignment in January 1993 and Portugal had to partly follow several realignments of the peseta. Given that the ERM code of conduct is based on multilateral rules for exchange rate changes, fundamentals should be less of a geographic than of a policy problem. Yet this peculiar form of neighborhood contagion was pervasive at the time³⁹.

National policy responses to a large capital outflow may be a combination of allowing reserves to drop, increasing interest rates, and depreciating the currency.

The relative importance of each one depends in turn on the particular circumstances of

³⁷ What Krugman 1997b and 1998a calls "Panglossian values". See also Corsetti, Perotti and Roubini 1998.

³⁸ Tornell 1998

³⁹ One possible reason is that the financial reputation of these countries was not fully established as their regime change was quite recent (1987 for Ireland, 1989 for Spain and 1992 for Portugal). A related reason is that testing the ERM parity made sense when the real appreciation was perceived as excessive by export oriented firms and the government may have been sensitive to their pressure. The bet proved correct for Spain, who initiated two realignments during the ERM turmoil. The Portuguese response was to follow in part, so as to reinforce its own credibility without suffering the direct consequences of a competitive depreciation. See my 1997b for details.

each country. May be depreciation is ruled out by an exchange rate arrangement, as in Brazil or is very costly in terms of financial reputation as was the case in Mexico and Korea, who had just joined the OECD, and in Russia, who had just been accepted into the G-7.

There may be constraints on the rise in interest rates that is politically or socially viable, and the increase in interest rates is more costly the weaker the banking system. Allowing reserves to drop, on the other hand, is less likely the lower the ratio of reserves to liquid liabilities. And if reserves are low, and cannot drop further, one of the two other alternatives, no matter how unpalatable, must be contemplated.

The exchange rate option will be more likely to be chosen the greater the real appreciation observed. But devaluation is a beggar by neighbor policy to the extent that it attempts to restore competitiveness at the expense of trading partners and may elicit retaliation. It therefore needs to be coordinated.

The same is true of exchange controls, which almost always function as a devaluation in disguise. Even when they seek to prevent excessive inflows, they are often not matched by free outflows, or even by a relaxation of existing controls.

This was true in Portugal in the early 1990s but can also be found in the Chilean experience⁴⁰. The issue is then how can devaluations and exchange controls be coordinated at the regional or global level, to lessen their beggar by neighbor character?

Systems like the ERM and its code of conduct come to mind, but they are difficult to adapt in the current world system. It may be, then, that the current crisis serves as a **coordinating device** by allowing responses that would not obtain in calm periods.

Even if they serve as coordinating devices, crises should be avoided. When crises loom, there is a great deal of interest in advance warning systems. Nevertheless there has been little progress in developing practical crisis **indicators**.

Foreign exchange reserves, for example, are still compared to imports with reference to the so-called "3 month IMF rule", without taking into account the exchange rate regime⁴². A better candidates for normalization, especially for inconvertible currencies, would be external debt. Under a fixed rate and free capital mobility, reserves should instead be compared to the broad money stock (M2).

While reserve adequacy depends on the exchange rate regime, none of these average measures are satisfactory under uncertainty. Reserves should ideally be related to the volatility of the current account or of short term capital flows.

A high ratio of bad loans to total loans is another indicator which has been used in looking for evidence of a lending boom. The increase in real lending to private sector and state owned enterprises is in turn how a lending boom is identified. The usual criterion for internal balance, namely a sustainable fiscal position, was absent in the Asian economies but it remains a serious problem in the CEAS - let alone the CIS⁴³.

⁴⁰ Ricardo Ffrench-Davis 1998. See also Bartolini and Drazen 1997, Dornbusch 1998a, Cotrella 1998 and De Gregorio 1998 and note 13 above on the Czech experience.

⁴² Ghosh et al 1998

⁴³ Belanger 1998 and chapter V in the IMF **World Economic Outlook** 1998.

Real appreciation in terms of effective rates is another early warning indicator. There again, care must be taken to net out the equilibrium component of real appreciation which has accompanied any successful development experience.

5.2. Market-Informed Views

Opinions commonly found among market participants do not allow us to pass judgment on the different aspects of the current emerging market crisis, but they help suggest some implications for policy⁴⁴ The following four market-informed propositions suggest that the surprise element was genuine.

First "investment prospects were good until the crisis hit". This would seem to dispute the over-investment story and it may reflect active involvement in the financing of such investments. Second "sentiment changed abruptly and turned inflows into outflows". This also shows the surprise element but it also underscores the severity of the crisis, to the extent that such reversals would be very short-lived otherwise. Third, "exposure was complex and opaque yet it was reduced very quickly". This proposition exacerbates the previous two points, to the extent that it shows panic, also a feature of the fourth observation, that "liquidation induced herd behavior".

Other propositions go more towards opinions on the state of the world and may therefore be more influenced by professional opinion. Thus "the crisis was like worldwide deflationary shock" and "confidence on unregulated globalised financial markets was damaged" imply views about what to do and whether or not economists are useful in sorting out the implications for policy⁴⁵.

In addressing this question, market participants often reflect a confusion between their opinions as business people (who prefer to keep free markets, perhaps flexible exchange rates) and their views as market professionals⁴⁶. Similarly, they may accept to strengthen regulation and supervision, including risk management techniques, before further liberalization of the capital account⁴⁷. And the so-called Tobin tax proposal may also be acceptable on this market professionals perspective⁴⁸.

Indeed, the fact that top rated academic economists with policy roles disagree and markets care about it would seem to confirm that "these are not normal times".

There is widespread agreement between academics and market organizations such as the group of thirty that some improvements in orderly workouts are desirable and easy to

⁴⁴ Rude 1998 and Sharma 1998 gathered the data in New York and Asia respectively.

⁴⁵ Leading columnists provide a more or less idiosyncratic combination of the two primary inputs. For example Wolf 1998 combines market sensitivities with citations from academic economists.

⁴⁶ For Rude 1998, the latter perspective might instead favor promoting orderly workouts and regional institutions like the "resolution trust".

⁴⁷ Dornbusch 1998b suggests mandatory value at risk reviews as called for by the Basle committee of the BIS. While developments in the technology may allow this, the concepts are still foreign to many financial institutions. See practical examples in my [risk.htm](#)

⁴⁸ Dornbusch 1998b quotes the literature including the original pieces by Jim Tobin. Krugman 1998b contrasts his views with those of other Charles River economists turned policy-makers and sees evidence that these opinions are being more listened to than is typical in calm periods. A corollary of Murphy's law (called Blinder's law in Cambridge, Mass) is that *economists are more listened to when there is less agreement in the profession and when the issue is one where economists have less of a professional answer to provide*. See also Stiglitz 1998 and Radelet and Sachs 1998.

achieve⁴⁹. Nevertheless, the traditional difference remains between national action on private debt and international action on sovereign debt. In the absence of international enforcement, the “pre-nuptial agreement problem” makes these improvements less likely to be accepted outside of a broader set of changes in the international system.

Lastly, the current crisis has uncovered an unusual amount of disagreement within the Bretton Woods institutions. And if they do even appear to agree with each other, the IMF and World Bank may not be capable of influencing the architecture of the international economy.

6. Conclusion

Even in the absence of perceptions of crises, it should not be assumed that the practices described in the sections 3 and 4 are widely and immediately understood in the CEAS. It certainly has taken many decades for them to be established in the advanced democracies. However, it is crucial that governments, leading domestic firms, foreign investors, and domestic, foreign and international financial institutions take a lead in establishing these practices.

Some of the CEAS are in the middle of the current EU group in terms of the budgetary institutions, suggesting that they are better fit for fiscal consolidation and, hence, for EU membership than Greece, Portugal or Spain might have been in the 1970s. While there is still much room for improvement, some of the CEAS are close to policy sustainability and to EU procedures and performances, on both macroeconomic, structural and institutional grounds. The fact that the Central European Free Trade Association gathers six of the ten states and that the others may join before EU membership also helps set the CEAS apart from other transition economies and indeed from previous applicants who had not been members of EFTA - such as Greece or Spain.

The immediate effect of the current emerging markets crisis is to underscore a lesson from the inter-war period which could well spread from the tariff escalation to non-tariff barriers like exchange controls. Liberalization and globalization must be better managed to prevent protectionist pressures from taking over.

Avoiding contagion by reverting into trade and financial protectionism could well prove as ultimately futile a beggar-thy-neighbor policy in the late 1990s as it was in the early 1930s.

Managing the emerging markets crisis means therefore allowing for a more effective regional and global response to threats of contagion of national crises through coordination mechanisms among monetary and fiscal authorities like the ones found in the EU. These mechanisms rely on shared economic and societal values, and the ten CEAS should adapt them among themselves through CEFTA or equivalent.

Over and above the parallels between the current emerging markets crisis and the Mexican devaluation of December 1994, the lessons from the crises in the ERM may thus be helpful in emerging markets to the extent that they were overcome by more

⁴⁹ For example the IMF should lend in arrears and there should be sharing or majority voting clauses in bond and bank loan contracts, allowing IMF to shelter countries from legal action (art 8.2b of Articles of Agreement). This list draws on the conclusions of the TAED meeting, on Portes 1998 and on Eichengreen and Portes 1995.

effective coordination mechanisms among monetary and fiscal authorities, the so-called ERM code of conduct.

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On the Eastern Enlargement of Euro-Atlantic Structures

Laszlo Csaba¹

1997 saw a major breakthrough in the controversy over the enlargement of the NATO and the European Union. Following the Madrid decisions of July 1997 the Czech Republic, Poland and Hungary have been invited to the NATO; Slovenia and Romania received semi-official assurances of their standing a good chance to be in the second round. At the cost of setting up the Russia-NATO council the acceptance of Russia has been assured to the enlargement decisions. Moreover, contrary to previous fears, the enlargement process did not prove to be a divisive issue in so far as the largest military power of Europe, which is also the largest new democracy in the post-communist era, has not been excluded from the new pan-European security architecture. This is a particularly encouraging new phenomenon. Already back in November 1990 the pan-European conference of Paris has institutionalised the new vision of security fitting to the new post-bipolar period. Accordingly, instead of divisive and potentially confrontational military alliances, it is a thickly knit multidimensional web of relationships among countries which delivers lasting security. The military component within this is, though by no means negligible, is far from being exclusive. The economic, legal, political, environmental elements, as well as the common answer to such global challenges as drug trafficking or trade in persons, or fighting organised crime as well as enforcing binding international agreements by a variety of means, complemented with diverse fora of conflict management round up the picture.

A major development of the 1990s was that political experience has settled a series of previously hotly debated issues. If in 1990 the possibility of pan-European answers to a variety of challenges seemed appealing, and not only to some of the traditionally pacifist quarters in European politics, but also to influential circles in US decision-making, this initiative proved to be illusory (again). The Conference on European Security and Co-operation proved to be less than instrumental in offering solutions or even partial remedies to the post-Yugoslav or the post-Soviet crises. The European Bank for Reconstruction and Development, which turned out to be financially quite efficient, recently even successful banking enterprise, played a fairly subordinate role in what is called “financing the transition”.

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Though the latter was macroeconomically probably inevitable, the very high level political engagement surrounding the setting up of EBRD, contrasted to the relatively subordinate role of underdeveloped member-states in the overall lending of the Bank, and clearly in sharp contrast. “Financing the transition” remained a task of private capital markets, as well as the institutions traditionally equipped to manage such tasks, as the IMF and the World Bank.

In the second phase of transformation, basically following the adoption of the Maastricht Treaty turning the EC into EU a security pillar of the union emerged. However, the creation of this most ambitious task, involving a partial transfer of core sovereignty, was declared at the time Balkan crisis turned into a bloody military conflict. Involvement here implied much more than signing joint declarations of good intent: it could, and eventually did, imply the loss of lives. Understandably, this was less than popular in most of the Union, and divergences of strategies/assessments of the member-states precluded any clear and definite line to emerge, leave alone to enforce.

It was particularly the Bosnian crisis which highlighted: there is no other structure or organisation but the North Atlantic treaty that is able and willing to make operational decisions and enforce them. These developments which emerged on the base of a series of partial decision, rather than derived from a long-awaited overall reassessment of NATO strategy in the post-cold-war era, has practically addressed most of the previously opened questions. First, practice has confirmed that neither UN, nor OSCE, not even EU fora are capable to substitute the operability of NATO. Second, NATO was dragged into a previously much contested field, i.e. extraterritorial activity, and not only for weeks or months. Third, Russia has been convinced by a mixture of practical evidence and skilful diplomacy, that in the post-bipolar world international action is not, by necessary, a zero sum game, where the gain of one is bound to be the loss of another. Actually, as in case of international terrorism or environmental catastrophes, it is non-action that may lead to a zero or even negative sum game. Thus NATO involvement in peacekeeping must not be seen as a sign of expansionary policies conducted at the detriment of Russian interest. On the contrary: Russia has already got thousands of kilometers on its Southern borders where fighting operations of regular and irregular troops has been going on for several years, requiring thousands of lives. And not only from Afghanistan to Dagestan, but also the sustaining tensions with the Ukraine pose a more than imaginary threat to Russian security. By contrast, the frequently evoked security vacuum emerged not in Central Europe but in the place of an oppressive and economically corrupt and failed Yugoslav regime.

In other words, it was not a policy miscalculation but a realistic assessment of longer term strategic interests of Russia that prompted a basically cooperative stance with NAATO in the Bosnian crisis. In the end of the day Russia grudgingly accepted the previously inconceivable: extraterritorial employment of NATO troops. More importantly it also accepted the stationing of US troops on the soil of a former ally, Hungary from 1993, as part of the peacekeeping operation of UN, long before accession talks of Hungary to NATO became operational. Moreover, neither troops stationing, nor the invitation of Hungary to the NATO have burdened Hungarian-Russian relations. On the contrary, Hungary is one of the few post-communist nations not having any major disputes with Russia, the minor points being the unfinished repayment with Russian debts originating from the COMECON period, the restitution of objects of arts unilaterally confiscated in 1945, and customs administration. Measured against the problem of Crimea, Chechnia, or for Hungary, contrasted to the

ecological consequences of building a new Danube Dam in cooperation with Slovakia, these bilateral issues remain truly peanuts.

This short summary of events may explain why in the third phase of transformation, when economic growth recovered and democratic handover of power took place smoothly, even the Bosnian conflict came to the end, Central European countries felt it appropriate to join NATO. It should be clear that this step is not motivated by a perceived threat of Russia.

Neither is it motivated by 19-century nationalist claims against neighbouring countries. On the contrary, joining NATO is in many ways a prophylactic measure. First, it institutionalised what has been achieved in terms of political and economic pluralism. Second it precludes any potential extremist force to become a major political player, as adherence to the North Atlantic community is one of the few consensus points in the political class. Third, it institutionalises cooperative behavioural norms in all walks of life, against the traditional national single-mindedness. Fourth, it provides guidelines and procedures to reorganise the armed forces along with the needs of a civil society. Fifth, it is obviously less costly to join collective defence than to build up credible deterrence on its own right by any country.

At this point the commonality of interest and the non zero-sum-game character should be restated. Seen either from Washington or from Moscow, the dynamics of the eastward enlargement of NATO contributes to the sustaining of peaceful development, consolidating democracies, thereby enhancing security in the Central European region against the threat of anarchy, infights or political turmoils of various sorts.

This is obviously also a least cost operation for both major military powers against any other conceivable alternative, especially in the long run. Given that the real threats for Russia originate not from history textbooks, but from what Huntington called the clash of civilisations, guaranteeing security in its Western frontier without having to contribute to it either militarily or financially is certainly not such a bad deal. On the contrary, experience with the CIS is indicative, that in its present shape Russia alone is usually not in the position to secure the same, even for areas that are strategically much more sensitive to it.

From a Central European perspective joining in the NATO as well as the EU implies a gain rather a loss of sovereignty. As Czechoslovakia in 1938, 1948 and 1968, Poland in 1939, 1945 or 1981, or Hungary in 1920, 1945 and 1956 could experience, nations of the area have always been objects rather than actors of international power decisions.

This is the first time in modern history, that Central European nations can join, out of their own will, an international alliance where participation is democratic and they are in a position of articulating their interest. This, of course, is to be understood in the context of global interdependencies, where the scope for unilateral action has dramatically decreased, from environmental to financial issues.

In a way, through its eastward enlargement NATO has thus made a second giant step in the redefinition of its activities besides extraterritoriality. The second aspect underlines the political, preventive and organisational qualities of the alliance, where securing democratic arrangements and institutionalising joint action is not necessarily and not primarily a defence concern. More precisely efficient defence is integrated into a multilayer overall strategy that is rightly called the new architecture of peace.

The NATO decision has certainly helped clarify some contested issues in the context of EU enlargement. In this latter field the controversies about democracy and political maturity have been a bit more general, sometimes subjective and esoteric. Involvement in NATO has had, on the above base, actually clarified how and why can one draw, at the moment, a dividing line among externally akin-looking new democracies in terms of their maturity and commitment to the western system of values. It also helped operationalise progress on the way towards understanding the new strategic philosophy and reality, circumstances above. From this perspective the Slovak referendum, inspired by the Meciar government's ambiguous stance on geopolitical issues has clearly shown a difference from the Hungarian vote of November 1997. In the former case, support for NATO was insufficient, in the latter, it was over 85%, with the number of votes favouring entry exceeding about 50% of the necessary margin - 3,5 mn instead of the needed 2,2 mn.

Enlargement towards the East is a process that follows from the wording of the Treaty of Rome keeping the door open for all European democracies and market economies. However integration in the Union has continuously deepened. Especially as the forthcoming completion of the economic and monetary union implies that new entrants have a much tougher job to tackle than on previous accessions.

Looking from the other side, the Union has yet never in its history faced an application en masse, i.e. 11 countries wanting to join a community of fifteen. Given the democratic arrangements in the EU - one member one vote in nearly all issues - the sheer potential of a massive enlargement was likely to pose a severe challenge to the operation of traditional decision-making structures. Already the Corfu Council of 1994 indicated, that the EU has reached its limits in terms of decision-making ability. In a curious but telling episode, the Amsterdam council of 1997 that was aimed at finalising reforms of the decision-making structure could not come to a final conclusion, as the exhaustion of the delegation at 4 am, prevented them from approving already basically fine-tuned compromises.

Looking from this angle, subdividing the applicant countries in two large and several groupings, as the Commission document Agenda 2000 did, has been the only feasible way to proceed. No matter how embarrassing diplomatically it may be, incrementalism has been the only way the Union could evolve. This was true for the 1960s with six members and it is understandably even more true for 15 members. The slower the Union proceeds with its internal reforms of decision-making, the slower the accession of new entrants is likely to be.

For the time being limited if any agreement exists among the incumbent members on the ways how common agricultural policy, common spending on structural funds and cohesion funds should be reformed. While there is palpable progress in theoretical literature and also at the level of Commission analyses in formulating viable and financable options, political will in several member-states, esp. in Spain, Austria, Greece and Germany is less than sufficient, at least as far one can judge from published statements of major policy-making figures on concrete - rather than abstract, general - issues. This may create a stalemate that nobody wishes.

From this perspective it is reassuring that the Luxembourg Council of December 1997 has put its seal on the idea of differentiating actual accession, whereas not letting any applicant out in the blue by involving them through the European conference. Also - as one of the few palpable innovations of the Amsterdam Treaty - the regular review of performance is applied not only to those aspiring to become members of the currency union but also to the applicant.

In other words, this gives room for current laggards to improve their competitive position by adopting vigorous and efficient policies that deliver quantifiable results. In terms of inflation, public debts or in terms of fiscal redistribution of GDP, the consolidated tax burden on payroll and the like give a fairly good indication of the economic health of individual countries. For the applicants it is probable that the trend of improvement may be more important than the actual figures. And conversely, the process of accession talks to be started in the second quarter of 1998 themselves may lend additional impetus to necessary, but politically embarrassing reforms. This applies particularly for instance to the Polish pension system, the Czech banking and securities sector, or the Hungarian health care and municipal financing systems.

How realistic is to expect countries with such a lower per capita GDP to become members of the single currency area? The answer to this is several. First anybody familiar with economic would expect the applicants first to make major progress on the disinflation front before membership could be realised. This is, alas, the self-interest of the countries concerned for social and economic reasons alike. On the fiscal front, the three most mature applicants are actually faring better in terms of debt/GDP ratios than many incumbent EU-members, with Poland 60%, Hungary 65% and the Czech Republic only 14% ratio. The real rate of interest is yet to converge but the time required for getting to the range of 4% forecast generally for the Euro is not historic - in Hungary currently it is about 6%. In sum, with continued effort the countries in the first group may well get into a financial shape, where they will have been able to make credible commitments to quality for emu in 5-6 years following their eventual accession.

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The Awarded Ph.D. Dissertation

Determinants of Direct Foreign Investment in Transition Economies in Central and Eastern Europe

Klaus E. Meyer

Motivation

After the fall of the Iron Curtain in 1989, most countries of the former Soviet bloc moved successfully from centrally planned economies and one party governments towards market economies with multiparty parliamentary democracy. In the transition process, Central and Eastern Europe (CEE) opened to Western business in 1989 expecting a positive contribution to the transition process.

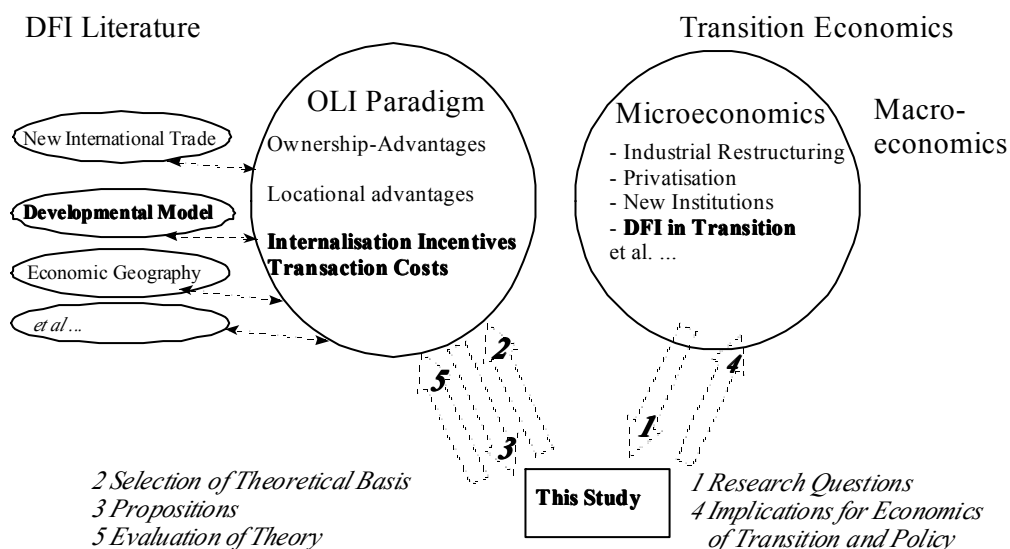
The prospect of direct foreign investment (DFI) incites expectations by policy makers in the region as it is seen as a potential source for knowledge transfer. Western DFI is hoped to foster the change in the economic system, e.g. by providing urgently needed capital; to generate cash revenues for empty government budgets via privatization; and to contribute to the restructuring of industries and upgrading of the aging capital stock in the region [IMF et al. 1991, Dunning 1991].

For the businesses in Western Europe, the fall of the Iron Curtain brought threats to established business operations, but also potential opportunities for expansion or reorganization. The region could offer major business opportunities for West-East business because of its untapped 'virgin' markets and low labor costs.

This first major analytical firm-level study on determinants of DFI in CEE investigates DFI in the first years of systemic transformation from 1989 to 1994, the period of most radical economic and political change in the region.

Drawing on recent advances in the International Business literature, DFI in CEE is analyzed providing an empirical test for propositions of this literature as well as new insights for transition economists (figure 1).

Figure 1: Analytical Approach



Economics of Transition

The literature in Transition Economics began with the analysis of the initial conditions in CEE and the discussion of the necessary steps of transformation, e.g. in IMF *et al.* [1991], Corbo, Corricelli and Bossak [1991] and Clague and Rausser [1992]. By 1996, the first experiences of the transition have been described and analyzed [e.g. Journal of Economic Perspectives 1996, World Bank 1996]. While early discussion emphasized macro-economic issues of stabilization and price liberalization, recent research focuses more on microeconomic restructuring and institution building. DFI interacts with many aspects of the transition process, and has therefore received considerable attention although only few comprehensive analytical studies have been presented.

This study addresses three issues of concern to transition economists. Firstly, the actual flow of DFI was disappointing in the first years of transition, but it increased remarkably by 1996. Until 1993, only Hungary received substantial DFI. The research attempts *not* only to understand why certain firms choose to invest in the region, but also why many others did not invest. The second issue is the interaction of the specific transition environment with the strategies of Western enterprises. This analysis compares activity in CEE (chapter 2) with the patterns posited by the international business literature (chapters 3 and 4). In addition, the variation of MNE activity within the region is explored. The third theme is the comparison of enterprises from two countries that have shown quite different patterns of activity in the region. Firms from neighboring countries, especially Germany, have been quick to react upon the new opportunities. Conversely, British firms have been surprisingly inactive.

Issues in International Business

The theoretical foundation of this study is the Ownership-Location-Internalization paradigm (OLI) developed by John Dunning [1978, 1993]. Within this paradigm, the study concentrates on internalization aspects (chapter 4). The internalization literature draws ultimately on the work by Coase [1937]. Caves [1971], Buckley and Casson [1976], Hennart [1982] and others advanced its application to multinational enterprises. Recent work has broadened the concept of internalization incentives, considering for instance transfer of tacit knowledge [Kogut and Zander 1993], information economics, and trust [Casson 1995]. In this study, a comprehensive model of transaction cost economics is presented for the international context by means of a synthesis of recent contributions in the field.

The empirical part tests aspects of the internalization theory, expanding work on investment versus licensing decisions [e.g. Davidson and McFetridge 1985] and on JV versus full ownership [e.g. Gatignon and Anderson 1988, Hennart 1991a]. Moreover, the analysis considers entry mode decisions regarding the choice between greenfield and acquisition entry. This follows lines of inquiry by Kogut and Singh [1988] and Hennart and Park [1993].

Complementing this work is a developmental model based on research on DFI in East Asia, e.g. Ozawa [1992]. The model also incorporates aspects of the development cycle [Dunning 1986, Narula 1995]. It explains DFI as a function of environmental characteristics in the home and host economy, subject to barriers to relocation. If push factors of structural change in an advanced economy combine with pull factors from less advanced economies, then the model predicts factor-cost oriented DFI. The model describes a special case within the OLI paradigm (appendix 3.1).

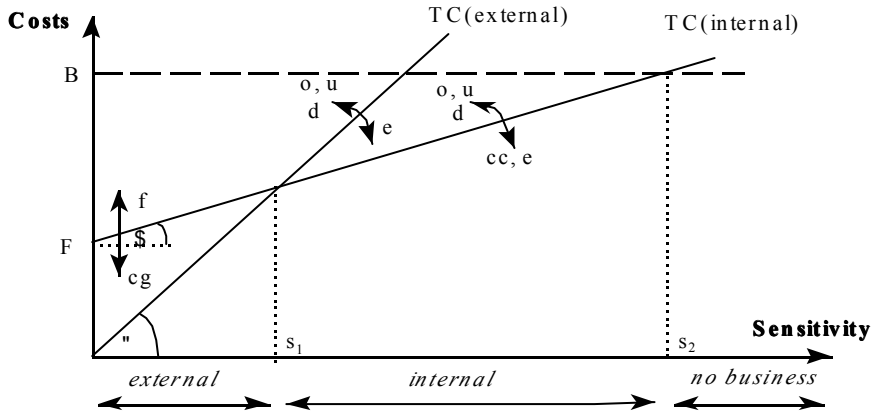
Structure and Methods of Analysis

The structure of this study is as follows: Part I gives an overview of the issues and outlines the research questions. Part II develops the theoretical basis for the empirical analysis in part III. Part IV concludes. The methods of scientific inquiry are altered for each stage of the analysis.

Since this research covers a new and under-researched area, chapter 2 provides a synopsis of the CEE business environment, DFI data and contemporary research. The method at this stage is a review of mixed sources but especially statistical data. Despite the poor quality of available statistical data it is possible to outline the main trends of DFI since 1989.

The second part develops the theoretical foundations for the empirical analysis. The multitude of analytical and empirical approaches on determinants of DFI are reviewed in chapter 3, with a special appendix for the developmental model. The transaction cost (TC) approach is selected as analytical framework, and further developed in chapter 4. The model focuses on the trade-off between internal and external TC. Both are related to a construct of 'sensitivity to market failure' which combines information asymmetry and asset specificity, conceptually distinct sources of market failure.

Figure 2: Changes in Transaction Cost Curves



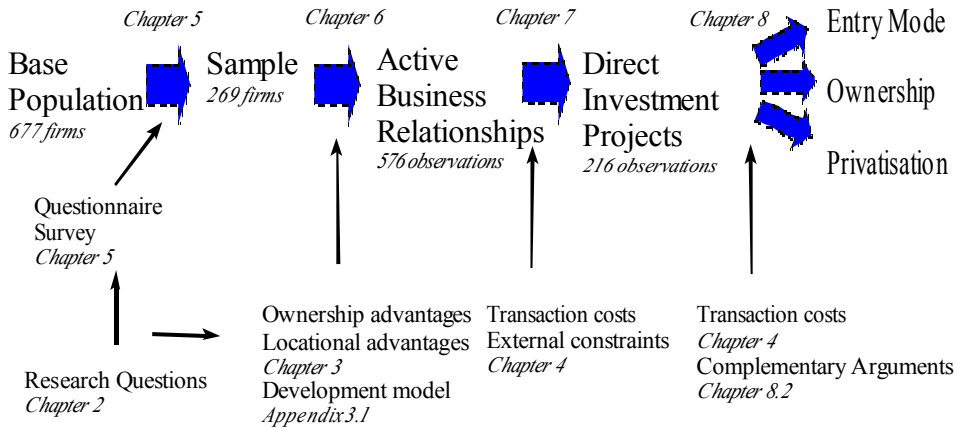
The shape of the TC curves depends on contract uncertainty (u), likelihood of opportunism (o), psychic distance (d), experience (e), corporate culture (cc), common governance (cg), and, under certain conditions, on access to financial resources (f) and the institutional environment. Figure 2 illustrates the basic relationships of the model. The chapter presents theory of the middle range to guide the empirical inquiry of this study.

Part three presents an empirical analysis of the determinants of international business in CEE. Prior and contemporary research on DFI in CEE concentrated on investment projects and neglected firms which are not involved. However, decisions concerning involvement or non-involvement in a country are part of the decision process. Therefore, a broad base population has been selected for this analysis.

The database was developed with a questionnaire survey of a stratified random sample of German and British manufacturing enterprises. Firms reported information on the nature of their business relationships with five selected countries: Hungary, Czech Republic, Poland, Russia and Romania. With 269 firms participating in the survey, 39% of firms contacted, it is the largest investor survey on Eastern Europe. The database also contains a number of firm-specific variables, mainly from company accounts.

Chapter 5 outlines the methodology of the survey and provides summary statistics. They confirm that German firms are more active in the region not only by number of DFI projects, but also by the depth and volume of business. Surprisingly, the number of projects varies far less among the Visegrad countries than statistics on DFI capital-flows would suggest, but far fewer firms are active in Russia and Romania. Furthermore, the data show that most investors follow market-seeking motives. Labor costs are reported, at best, as a complementary motive, and hardly ever by British respondents.

Figure 3 Structure of the Empirical Analysis



The empirical analysis consists of three tests related by one decision-tree-model. Firstly, a firm would decide whether to engage in business with the region, then whether to invest directly, and finally the entry mode for their investment project. In Dunning's OLI-terminology, ownership and locational advantages would be decisive at the first stage, while internalization incentives apply at the second and third stage.

In chapter 6, active and inactive firms are distinguished. Hypotheses are tested on the determinants of firms' propensity to be active in one or several countries of the region, using alternative specifications of the dependent variable. Binomial and ordered probit models are regressed, of which the ordered probit with three categories (rather than *number* of partner countries) shows the best performance.

The hypotheses are based on the notion that firms would be more active if they have ownership advantages that can profitably be combined with the locational advantages in CEE. Evidence is found in favor of all four groups of proposed variables: intangible assets, common governance, barriers to growth and proximity. Common governance variables receive the strongest support: large, internationally experienced and *undiversified* firms are most likely to be active. With the exception of the diversification effect, the same determinants are found in the ordered models. Interestingly, slow growing firms are more active, which lends support to the cost-push proposition of the developmental model.

In chapter 7, the active businesses are further investigated to distinguish investors from firms with trade or contractual relationships. The dataset contains 576 useable observations of active business with either of the five host countries. Ordered and multinomial logit models are regressed and compared to assess the notion that contracts are an intermediate form between trade and DFI. Internalization incentives are predicted to increase the propensity of DFI versus trade and contractual arrangements.

The empirical results show that economies of common governance are the prime determinants of a firm's propensity to invest. This effect dominates variables derived from traditional transaction cost proxies, such as R&D and human capital intensity. The results vary depending on the stages of the product chain located in CEE. Interaction effects emerge for both home and host countries, but could not be detected for uncertainty. Furthermore, the ordered model is rejected in favor of the multinomial, suggesting that contracts are a distinct mode of market entry. They are used even by high technology firms presumed to be most sensitive to market failure.

In chapter 8, 216 DFI projects are analyzed. Logit models are applied to analyze the choice of ownership form between wholly owned, majority- and minority-JV, and the choice of entry mode between greenfield, acquisition, joint-ventures (JV), and JV-acquisition. Most hypotheses derived from the theories of DFI receive empirical support. Firms sensitive to market failure prefer full ownership over JV giving more support to traditional TC arguments than the results in chapter 7.

The nature of core capabilities explains preferences for greenfield entry by technology intensive and non-food consumer good manufacturers. Firms presumed to require complementary local assets prefer acquisitions or JV-acquisitions. Surprisingly, acquisitions and JVs are not preferred in industries where the strategic motive of speedy entry is be important. Here, the weakness of local firms and the privatization process lead to unusual patterns. The theoretical arguments of different streams in the literature suggest contrary effects with respect to international experience and psychic distance. The empirical evidence suggests that the dominant effect that inexperienced and distant investors prefer JVs as a mode of learning and risk sharing.

A complementary test compares determinants of acquisition entry (incl. JV-acquisitions) and participation in the privatization process in the region. As predicted, both logit models return similar coefficients for most variables, with two interesting differences: German firms with international experience are more likely to acquire privatized firms while technology intensive firms abstain.

The concluding chapter interprets the research findings and their limitations, policy implications and suggestions for further research. The remainder of this abstract summarizes these conclusions.

Contributions to the International Business Literature

Research Findings and Implications

The empirical results suggest that firms' capability of managing a business is more important than the market-characteristics both for the decision to become active, and for the choice of organizational form and entry mode. Economics of common governance and management determine firms' propensity to be active. Yet hardly any advantages of intangible assets induce business in CEE or its internalization.

Of the components of the TC framework, some support is found for information content while evidence for asset specificity and for interaction effects with uncertainty is weak. This is in line with the reviewed empirical literature which is more supportive of information variables than any other. The results confirm the explicit treatment of internal and external TC in the

theoretical model, and the conceptual distinction between asset specificity and information asymmetry.

Secondly, psychic proximity not only encourages the emergence of international business, but also its internalization. The country pattern found in chapters 7 and 8 suggests that business in proximity is more likely in form of DFI rather than contract, and full ownership, acquisition and participation in the privatization process rather than a joint-venture or greenfield project. Thus, distance appears to affect internal TC and costs of integration of an acquired firm more than it affects external TC.

A third result is the inferior performance of the markets versus hierarchies approach in chapter 7. A scale from markets based on price-mechanisms to hierarchically organized firms appears insufficient to account for the variety of international business. The superiority of the multinomial over the ordered logit suggests that contracts are a distinct form of business rather than an 'intermediate form'. In fact, contracts are chosen by many firms expected to favor internalization because of their information intensity. Contracts appear sufficient to protect their interests, especially for business outside their core markets.

Together, the results suggest that capabilities of a firm to manage the new operation are the major determinants of internalization. The causality in the decision process may be as follows: firms take strategic decisions on the kind of activity they would undertake in a country, i.e. which parts of the production chain to locate there. This decision defines the interface between the business units in the two countries. The firm's capabilities to manage the new venture, together with the nature of the interface, determine the organizational form. The relative advantages of available organizational forms for an interface can additionally create feedback effects such that decisions are interdependent (figure 4).

Concerning the choice of entry mode, it implies that firms with unique competences embedded in their organizational or technological structure abstain from modes that require sharing control or impede implementation of an organizational design. They prefer either contracts or greenfield investment. Both modes avoid sharing control over uncodifiable or difficult-to-value knowledge. Contracts can be used to transfer clearly defined technology or stages of the production chain. Greenfield projects allow the recreation of major units based entirely on the parent's organization and technological concepts.

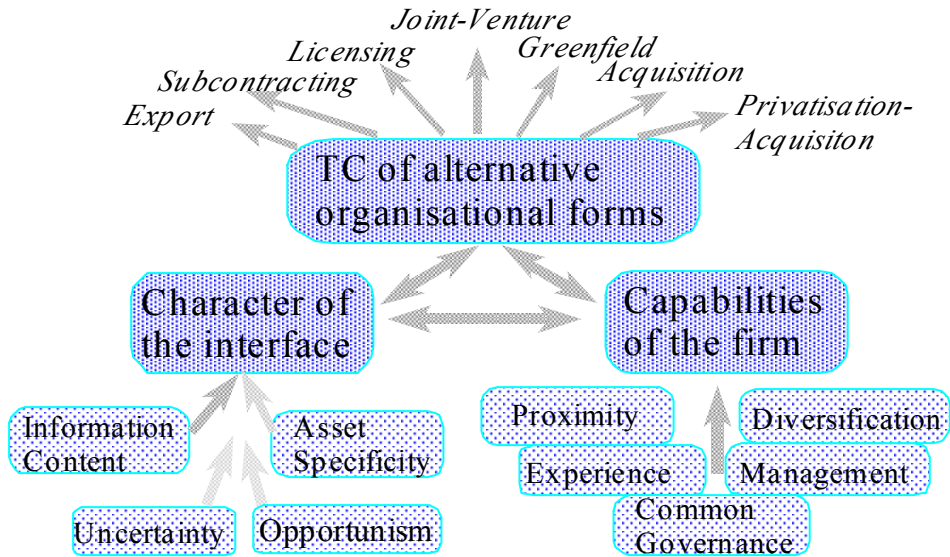
On the other hand, companies with capabilities in managing a variety of activities are more apt to invest directly, particularly by acquiring, restructuring and integrating local firms. Large and internationally active diversified firms are less concerned about technological spillovers than about putting their management capabilities to work. Global multinationals are also more capable of managing a wholly owned affiliate. Firms with less experience in international management prefer a JV with a local partner to acquire know-how on the local environment, despite the higher cost of managing a JV.

The results expose fundamental weaknesses in Williamsonian TC economics:

- By focusing on market failure, TC analysts may overlook important aspects of internalization decisions, especially the capabilities of firms in managing operations.
- By focusing on markets and hierarchies as the basic modes of organization, TC analysts may overlook the diversity of organizational arrangements.

- By focusing on given transactions, TC analysts may undervalue the dynamic interaction between organizations and transactions, and how established organizations develop new transactions.

Figure 4 Choice of Transaction Modes: an Interpretation



Conceptual work on TC can bridge many of its weaknesses. Limitations arise in the operationalisation for empirical research questions. TC is unsatisfactory for the empirical explanation of internalization decisions in firm level analysis. However, it helps to identify factors influencing these decisions. The comprehensive model in chapter four incorporates many aspects, explicitly showing the eclectic character of TC, and emphasizing the trade off between internal and external TC. The actual determinants are even more complex. Each organizational mode has different TC, which adjust varying with growing output, over time, and other dynamic influences. Figure 4 offers a conceptual interpretation, which additionally considers a possible interaction between the capabilities of a firm and the interfaces it creates.

Evaluation of the Methodology

Limitations are unavoidable for a study with broad objectives in unexplored territory. The data-set was a compromise between the objectives of understanding DFI in CEE and testing propositions of general theory. The challenge was to make the best use of the available data requiring the careful interpretation of evidence. The focus on CEE makes it difficult to obtain data of the quality and sample size used in empirical tests of general theories using US or UK data. Data availability constrained the selection of independent variables especially for host country industry level data, e.g. industry concentration. In addition, a questionnaire may focus on a small number of industries that are of specific interest from the theoretical perspective at the expense of greater generalization. Relatively unsophisticated proxies had to be used for some of the theoretical concepts.

The return rate of questionnaires was high and did not suggest sample selection biases, although due to missing values for some firm-specific variables, a modest selection bias against German SME's emerged. A selection issue also arises for the sample used in chapter 8. It is not a representative sample of all DFI projects, but representative of the activities of the base population of Western firms. This is a result of the analytical approach, using the same base population for each stage of the analysis.

The decision model itself can be challenged. It is based on the assumption that decisions are not interdependent. Although more complex empirical models are available, this thesis gives preference to the model because it generates interpretable coefficients, and is superior to prior research that analyzed only selected decisions within the decision process.

As with most questionnaire surveys, the information provided is based on retrospective memory that may not be objective. Since most questions requested factual information, and few evaluative or perceptual variables are used in the empirical analysis, this should not cause major biases.

Further Research

The empirical tests can be refined using more complex econometric techniques, such as a nested logit model for the decisions regarding activity and organizational form (chapters six and seven) or by including contracts and DFI to replicate the test by Chu and Anderson [1992]. This would allow to test specific theoretical propositions, such as interdependence of alternative choices. However, with the given data-set such aggregations would result in degrees of freedom problems unless some interesting independent variables with missing values were omitted.

Theoretical work may consider alternative approaches to the reigning TC paradigm. This study is 'normal science' in that it applies existing theories and paradigms. The TC approach is applied and, while it is not rejected, the author believes that developing alternative approaches to these issues should be worthwhile. In other words, a shift in the dominant conceptual approaches to these issues may be forthcoming. The dissatisfaction with the basic premises of TC, and agency theory, led to a literature in management and economics that could be called 'the search for the new theory of the firm'. Where should one search for new paradigms?

Firstly, a major weakness of the TC approach is its static nature. Dynamic alternatives should be further developed since experiences, strategic interaction and changing environments are important determinants of multinational business activity.

These include internationalization process models, the new international trade models, and the developmental model. Secondly, organizational forms for transactions should be mapped with concepts beyond markets and hierarchies. One suggestion is to map organizational forms along multiple scales of characteristics and determinants. Trade, contracts and wholly owned affiliates may be at different corners of such a matrix, with JV in an intermediate position.

Thirdly, theorists experiment with new concepts. A common starting point is the view that firms do things that markets do not, or cannot, do. Many discussions surround the issues of knowledge and innovation. Firms are social organizations that follow an evolutionary pattern of accumulation of knowledge [Kogut and Zander 1992, 1995]. They are organizing teamwork

[Alchian and Demsetz 1972], innovating [Teece 1995, Ghoshal and Moran 1996], focus on 'value creation' [Ghoshal and Moran 1996a] and 'dynamic capabilities' [Teece and Pisaro 1994]. Firms provide a role for entrepreneurial judgment and decision making [Casson 1991 - also Knight 1929]. They differ in their ability to manage knowledge [Demsetz 1988] and information, as well as their corporate culture and thus the level of trust within and between firms [Casson 1991, 1995].

This study supports the shift of attention from market failure to firms as organizations. Common governance, experience and managerial capabilities are empirically supported in the analysis. How do these firm characteristics influence the ability to manage knowledge accumulation, evaluation and diffusion, and thus the choice of modes of business? Figure 9.1 may stimulate new theoretical modeling.

Contributions to Literature In Economics of Transition

Research findings

Besides the results for the Economics of the Multinational Enterprise, this study yields interesting insights specific to the CEE region. Research in the field of Transition Economics is more exploratory and policy oriented, and so are these conclusions. The main result is that determinants of multinational business activity in CEE are largely consistent with those suggested by the literature and the observed patterns in other parts of the world. Only few specific environmental conditions of CEE are shown to affect the pattern of inward DFI.

First, the variation of DFI projects among the Visegrad countries is surprisingly small given the variation of aggregate inflows of DFI capital. Hungary is among the most successful recipients of DFI capital in emerging markets in *per capita* terms receiving almost twice as much DFI as Poland or the Czech Republic. Nevertheless, no statistically significant differences emerged for any of the business activities analyzed in the empirical part of this study. Capital flow data in contrast are dominated by a few large projects, especially due to the privatization of utilities and other large corporations.

The main differences within the region are between the Visegrad countries and the other two countries of the study, Russia and Romania. Romania is lagging by a substantial margin on most measures of activity. British companies have rarely integrated Romania into their CEE expansion. This lag is more apparent in DFI, but less in the trade pattern. At the time of data collection in 1994, Romanian businesses are not yet considered an attractive business partner.

Russia is a potentially attractive market, with businesses waiting *ante portas*. They are interested, but are not yet willing to risk full-fledged involvement. The survey shows that Russia has almost as many business contacts as Central Europe but a different structure of underlying business. Most businesses follow a risk averse strategy with a focus on the potential long-term benefits of an early market entry.

They prefer trading relations without DFI, contractual arrangements, and investment in JV's rather than in wholly owned affiliates. Correspondingly, JV's and JV-acquisitions are the most common modes of entry, and few investors participate in the privatization process. This could be a result of the higher risk of a less developed economic and institutional environment, but

could also result from a larger psychic distance where entrants follow low-risk learning strategies.

Secondly, German firms are more active in the region than their British counterparts. This is now well established for the volume of DFI capital flows, and this study established this at a firm level. By various measures, Germans are more deeply involved, and more likely to use factor cost differentials. The region accounts for a larger share of their overall business. Small German firms in particular are more active than their British counterparts.

These differences may be attributed to the geographic, historical and cultural proximity, and to more extensive contacts to the region before 1989. Hypotheses of proximity favoring internalization received empirical support in chapters seven and eight. In addition, this study discussed the impact of differences in the economic environment. The developmental model illustrates how push factors in the home environment induce DFI. German firms face more pressures on their competitiveness due to high labor costs, currency appreciation, and the deep recession following German unification.

This induces firms to seek new opportunities in the East, particularly those that have reached barriers to growth in their present strategy. The negative effect of firm growth also supports this argument suggesting that slow growing firms are more active in CEE. This is very remarkable as these firms would have fewer managerial and financial resources. According to the growth theory of the firm [Penrose 1959/1996], their limited resources would inhibit expansion.

The different reaction of the German and British business communities to the opening of the East has feedback effects on the economic restructuring of Western Europe. German industry is adapting to the changing environment, with entry to major new markets, the internationalization of medium size firms, and production relocation. British industry is only remotely affected as some enterprises expand their global markets. This development will probably affect the process of structural change within the European Union. Germany is experiencing the upgrading and expansion of advanced industries and a loss of competitiveness in low-tech industries. Thus, the two economies may be moving further apart rather than converging.

Thirdly, no evidence suggests that the search for low labor costs has been a major motive for firms investing in CEE. The survey finds only five firms indicating factor-costs as their only motivation. Most investors reporting factor-cost motivation also report the market motive. This implies that only jointly with attractive markets do lower factor costs attract inward DFI. Furthermore, the importance of factor-costs is an industry specific phenomenon. Low labor cost has partly motivated 41% of machinery industry DFI, but only 19% of projects in the chemical industry. Note that this study does not cover the textile and clothing industry, in which the low factor costs are likely to be more important. Consequently, the proposition of the developmental model that investment would be primarily factor-cost seeking is not supported. Competitive pressures and the recession seem to induce firms to seek new markets at least as much as lower labor costs.

Why is this so? Whether or not factor-costs play an important role in a firm's locational decision depends on its labor intensity, minimum efficient economies of scale and transportation costs. These vary substantially across industries and between the two home countries. Low labor cost operations are not sensible, for instance in capital intensive chemical

industries, or transportation cost intensive food industries. For German firms, transportation costs are less of a deterrent as a matter of geography. In addition, labor cost considerations are more important due to the higher West-East wage differential. The survey also showed a substantial number of subcontracting arrangements by German firms. These use factor-cost differences without capital commitment, and may be the first steps of relocation of production. Since the survey was conducted a short time after CEE opened, it contains few projects that require long implementation lags. This would affect factor cost oriented projects more than market entry strategies.

However, the general trend in Western Europe is towards capital intensive production and manufacturing close to the customer. Thus there are few firms left in, say, Germany who would have their competitive advantages in managing labor intensive operation. At their advanced stages of internationalization, firms are increasingly competing based on organizational rather than technological capabilities. They undertake market and strategic asset seeking DFI rather than factor-cost minimizing strategies.

Fourth, firms do not enter the region through acquisitions of local firms with the strategic objective of acquiring local know-how and obtaining speedy market access. These arguments in the International Business literature are not confirmed in this study. Transition specific influences lead to surprising effects. Investors prefer greenfield entry even when complementary inputs are predicted to be valuable, such as with consumer goods industries, or when speed of entry is important, such as for fast growing industries. The trend towards greenfield entry implies that these objectives are becoming even less important. The cause of this trend may be a lack of attractive targets or discouraging features of the privatization process.

The privatization accounts for half the acquisitions and JV-acquisitions in the sample. It attracts large volumes of direct investment capital, but it does not affect the number of firms investing in the country in the industries studied here. The incidence of DFI by MNE's in a country seems unaffected by opportunities in privatization, but capital invested is affected. However, privatization attracts an over-proportional number of investors from Germany. Their historical, cultural and geographic proximity to the region eases both participation in the process and the integration of acquired firms into their global operations. As expected, technology intensive firms abstain from acquisitions, especially in the privatization process. Privatization agencies seem to favor factor-cost seeking investors, presumably a result of industrial policy by privatization agencies.

What accounts for these patterns? Lack of attractive target firms, and the costs of restructuring reduce the attraction of acquisitions *vis-à-vis* greenfield operations. The negotiation process needed to acquire a firm involves multiple stakeholders and is time consuming. The post-acquisition costs of acquiring formerly state-owned firms are a further deterrence to acquisitions. Foreign investors are expected to induce enterprise restructuring, creating a competitive local manufacturing base. This conflicts with many objectives that investors may have, such as a local market focus, a small and efficient workforce, and adaptation to the parent firms organization, technology and brand names. It is primarily firms with financial and managerial resources that can engage in industrial restructuring and thus participate in the privatization process. The pattern indicates that sales to foreign investors may contribute to the restructuring of existing enterprises through the introduction of modern market-oriented

management and organizational restructuring. However, it fails to attract firms which would bring specialist technology, an over-optimistic expectation.

Policy implications

The prime policy objective in the Visegrad countries is to sustain and make best use of international business activity and DFI inflow. The small number of firms indicating a factor-cost orientation in CEE suggests that host countries are not taking full advantage of their comparative advantages. Low labor costs, even productivity adjusted, are insufficient attraction to investment as this advantage is shared with many other regions in the world. They are rarely the sole motive for investment, but usually combine with market oriented objectives. More investors will produce locally only if local markets are also attractive. Investors may develop the export potential from the region once they have saturated the local market. Privatization is the most important means of industrial policy. The empirical results suggest that it is used to encourage export oriented ventures.

A different contribution of foreign investment is the transfer of technology. The potential contribution of investment in the special conditions of economic transition has been discussed recently by McMillan [1993], Kogut [1996] Estrin Hughes and Todd [1997] and Meyer [1997]. This study emphasized that contractual arrangements can substitute DFI for many operations. Host governments need to consider whether they can achieve objectives, such as inward technology transfer and market access, through contractual arrangements. In this case, policy and economic analysis should focus less on DFI than on broader concepts of international business.

The shift over time from JV and acquisition to greenfield entry changes the contributions of foreign investors. They are contributing less to the restructuring of formerly state-owned enterprises, but more to the development of a new private sector. Greenfield projects affect employment creation, technology transfer and productivity. The emphasis of foreign investors on greenfield projects finds a parallel in the domestic economy. The recent growth of CEE economies, especially Poland, is attributed primarily to the growth of a new private sector, and not to the reformed and privatized former state-owned enterprises. [Johnson and Loveman 1996, Richter and Schaffer 1996]. This study strengthens the expectation that the new private sector, domestic or foreign owned, may flourish in the next years as economic transition progresses. Industrial policy may foster growth by encouraging the new private sector.

In Russia and Romania, the main concern is still the low level of foreign investment. By 1994, many firms are present in Russia but without major capital commitment, while Romania seems to receive low priority in most firms' regional strategies. Here, the policy priority should be on reforming the local environment so as to improve conditions for both domestic and multinational businesses.

The secondary attraction for foreign investors is an indicator of a slow transition process as investors react sensitively to 'weak' local environments. The current lag in attracting DFI also indicates that the economy benefits less from externalities attributed to DFI. It is beyond the scope of this study to determine whether or not the impact of such externalities is economically significant.

The differences between the Visegrad countries and the other two countries suggest that DFI inflow depends on the economic conditions in the host country. This includes the presence of local entrepreneurs as partners and quality suppliers, education profiles, the structure of

domestic demand and income, the institutional framework and infrastructure. By these criteria, Russia and Romania are lagging behind the Visegrad countries. This has an implication of wider relevance: DFI is not a 'kick-starter' to economic development. A minimum level of economic development is certainly a precondition to attracting major DFI inflows. Once development has taken off, inward DFI can accelerate the development process and, in CEE, the economic transition. This indicates that governments should create a domestic environment conducive to market-led business development to foster both local and foreign businesses.

Directions for further research

Research on DFI in CEE started with country surveys and has recently moved on to the analysis of more specific issues. The demand for descriptive summary papers has been well satisfied. As the pattern of DFI has been established in broad terms, the focus of this study has been on determinants and characteristics of investment. Some suggestions can be made on specific issues that future research should address.

From this study, the most interesting research questions appear to be the effects of country of origin, strategic investment motivations, the comparative analysis of emerging markets, the impact of DFI on economic transition and development, and government policy. For thorough analysis, the collection of better data would be very helpful, considering not only capital flows but business operations by number, size, performance etc.

This study analyzed differences between two countries of origin. With only two countries in the study, relating differences in activities to the underlying determinants specific to the country of origin has been difficult. Thus, a wider range of home countries should be analyzed, considering for instance the USA which is a major investor in the region, but also other Western European countries. Among other things, this would permit a test of the push factors proposed by the developmental model.

Strategic behavior of foreign investors was hypothesized but could not be shown in the empirical analysis due to a high level of aggregation of the data. In chapter eight, the standard propositions on strategic motives for acquisition entry were not supported. An interesting line of inquiry would explore the specific features of entry strategies in the transition context: what are the strategic motivations of foreign investors in virgin markets, and the interactions between potential investors, local institutions, and local businesses?

The developmental model was a first attempt in using the experience of other emerging markets to analyze and predict patterns of DFI in the region. An interesting analysis would test the propositions of the model systematically in a wider context comparing the emerging markets of Eastern Europe, East Asia and Latin America. This research should integrate the development economics literature on DFI [for instance Enos 1989, Lall 1996] with the emerging literature in CEE.

From the host country perspective, the main issue is the impact of DFI on the economic transition and development in the region. No study has yet analyzed the 'impact' on the CEE economies comprehensively. The interesting questions are, at this stage: how, and how much, does this DFI contribute to transition and development? Understanding why firms invest in the region is a first step towards understanding their interaction with the local environment. This

interaction can generate externalities of foreign investment. Future research could draw on related work on DFI in developing countries. It has to consider as well the special conditions of economic transition, and the role of technology transfer that has become so important in recent years. Implications of DFI for the balance of trade and balance of payments may be secondary.

An interesting aspect is the relationship between project characteristics and impact variables. Of importance are the human capital related channels of impact:

The transfer of technological and managerial expertise to the local affiliates,

The introduction of new value systems and business culture [Casson 1994],

The diffusion of know how beyond the foreign owned affiliate, and

The industrial restructuring and corporate governance of formerly state owned enterprises [Kogut 1996, Meyer 1997].

If such externalities to the local economy were shown, a case could be made for an active industrial policy to encourage DFI. This relates to another under-researched issue, the effectiveness of government policy towards inward DFI. The evidence from other countries seems to suggest that specific policies, such as incentives or tax holidays, have little impact on the volume of DFI. However, they may affect location within a country and DFI performance, for example export propensity [Guisinger *et al.* 1985, Safarian 1993]. This line of inquiry needs to be extended to the CEE region, considering the special conditions of transition as well as the motives of DFI observed in this study.

Economic Systems: Stability, Growth, Integration

Stability and Change of the Economic System: Transition in Central-Eastern Europe

Bruno Dallago*

1. Introduction

Change is the normal situation of any living organism or structured group. However, the type, pace, direction, and specific features of change may greatly vary according to the features of organisms and groups, time, sequencing, location, and other environmental characteristics. Here I consider a specific type of economic change, namely change of the Soviet-type economic system into a different economic system.

By economic system I mean the co-ordinated set of economically relevant institutions and structures (e.g. the information structure) that live in and operate through individuals and organisations. Institutions are humanly devised constraints that develop spontaneously or by design for different reasons. They arise from the effort of actors to reduce uncertainty in their environment or their activity by limiting the choices available to the players and structuring human interaction.

In this way they make behaviour predictable. However, institutions may also arise purposefully or spontaneously to better co-ordinate the activity of actors, thereby reducing production and transaction costs and possibly producing externalities. Being impossible to define and enforce property rights of institutions, such externalities are usually also captured by actors who simply imitate institutional entrepreneurs. The way in which institutions arise has important consequences for the actors' learning, knowledge accumulation, and for information circulation.

Structures are the set of links that connect and co-ordinate institutions and activities based on those institutions. For instance, the private property structure is defined by the interaction of enforceable private property rights. Therefore, the structure consists of a bundle of decision-making rights and the possibility to allocate, control and enforce those. Similarly, the information structure includes the different sets of links among institutions

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relevant in different fields of activity and the signals derived therefrom (e.g. prices, plan commands).

The fundamental idea of socialist revolutions was to base the economic system on new institutions (embedded in the “socialist man”) and new structures (the planned system) in order to improve the co-ordination among economic actors. Thus the new system was supposed to decrease production costs and produce positive externalities in favour of the entire society. However, this outcome did not materialise in Central and Eastern European countries, for various reasons that I will not discuss here. The legacy that this “experiment” left in those countries is a reality that should not be overlooked when explaining transition.

The paper deals with the Soviet-type economic system and its change towards something different (ideally a developed capitalist system) during a period of transition. The next section introduces the basic concepts of the systemic specificity of assets and investment in system specific assets as an investment in the opportunity set defined by the system. Section 3 deals with the stability of the traditional system. I maintain that a system may be stable if a set of conditions hold and that this does not require systemic efficacy as a necessary condition. In fact, stability depends on systemic goals, the choices of economic actors, and the external environment. Systemic stability also originates from the obstacles that exist to systemic change. These obstacles may prevent change even if actors are convinced of the social rationality of such change. Obstacles to systemic change are analysed in section 4.

However, change may take place when a set of conditions holds. The reasons for change in Central and Eastern Europe are presented in section 5 and the features of systemic change are discussed in section 6. Different types of change exist. However, one specific type of change usually prevails depending on the actors’ capital and choices and the specific goals set to change, the starting situation, and the specific mode of change. If the system is resilient to evolutionary change because of the pervasive importance of systemic capital (as was the Soviet-type System), chances are that systemic change has the form depicted by the punctuated equilibrium theory.

Systemic change implies costs and produces gains. This opens the question of their allocation and their governance and requires that specific structures are set up to govern the allocation of costs and gains. The existence of relevant costs to change and the possibility to capture gains are the basic factors of path dependency of change. This is discussed in section 7. Summary of the main findings and conclusions are presented in the final section.

2. Asset Specificity, Investment, and Systemic Capital

Rational actors have an interest in improving their position among the constraints and co-ordination the system imposes upon their activity. Although their rationality is bounded because of the limits to their ability to gather and elaborate information and to their knowledge and because of the many flaws of real systems, rational actors are interested in investing resources in system specific assets.¹ This is investment in the opportunity set

¹ In the definition of rationality that I use here, I follow H.A. Simon (1955), who observes that human decision making is “boundedly rational”, because it is limited by our inability to process all the information that is available as well as by our inability to be consistent in our preferences. “A theory of bounded rationality seeks to identify, in theory and in actual behavior, procedures for choosing that are computationally simpler, and that can account for observed inconsistencies in human choice patterns.” (H.A. Simon, 1990, p. 16) This approach depicts a “satisfying” behaviour that uses a variety of heuristics, cognitive

defined by the system, either to adapt or to gain individual advantages or to oppose any unfavourable alteration of the distribution of assets or bargaining power and of relative value of resources.

I define here asset specificity to denote that, when the economic system changes, assets cannot be re-deployed to alternative uses and by alternative users at all or without major sacrifice of productive value.² Ideally, assets can be distributed along a continuum that goes from pure system specificity to pure generality depending on the loss of value following systemic change.³ In the former case, the value is totally lost, in the latter a loss of value takes place. Alternatively, system specificity can be defined by the rate of substitution of a given asset within a given system following the transformation of the economy and her structure. Pure system specific assets remain ideally unaffected, while general assets change and so does investment in them.

Although in reality no such pure cases exist and investment has a mixed nature, the degree of system specificity and generality are important features to define the role of assets within the economic system and their fate during and after systemic change. If the economic system is productive in the sense it reduces the costs of production (there including transaction costs) or increases the product obtained by utilising existing resources (e.g. via better co-ordination of the actors' activity) compared to an economy made of atomistic producers the investment of resources in system specific assets is necessary condition to capture the net outcome. Investment in system specific assets is necessary condition to capture the value of this outcome via greater control, enforcement, and bargaining power and better systemic knowledge and information.

Consequently, investment in system specific assets creates asymmetries of the actors' ability to influence the outcome of economic activity and the allocation of the costs of control. Being the latter cost paid by those who are controlled, investment in system specific assets also sets the limits to the productivity of general investment and return therefrom. However, the value of past investment in system specific assets is lost when the system is changed and its value is reduced by any change in the environment, the economy and also by investment in system specific assets by other actors. If additional investment is unable to improve the efficacy of the economic system, for individual investors this investment is a zero-sum game that requires additional investment just to keep the starting position.

On the other extreme, other assets are purely general, that is, their existence is independent of any particular system. They relate to the existing technology of the economy and determine the performance of the economy within the boundaries set by the investment in system specific assets.⁴ Being purely general, this investment is not lost when the system is changed. Its reward and value may even increase if systemic change diminishes the cost of control and enforcement by increasing the relative importance of general assets.

shortcuts, rules of thumb in their decision making process in order to simplify the sorting and analysis that decision making requires. Therefore, one can consider rationality of economic action as a variable individually or socially defined that identifies the actors' effort to improve consistently their situation and that depends on the situational structure actors face within the constraints defined by the economic system and the environment.

² On asset specificity in a microeconomic context cf. O. Williamson, (1975), (1985), (1993), who proves that some form of organisational safeguard is necessary to facilitate such investment and achieve efficient supply.

³ This sharp distinction, although irrelevant in real economies, is useful to clarify concepts.

⁴ Again, one should remind that existing technology is partially dependent on the existing economic system.

This takes place when systemic change increases the relevance of impersonal structures of governance and the co-ordination of decisions and activity becomes less costly. This may happen when actors are guided by self-interest or embedded and shared rules of conduct.

The Soviet-type system offered many and important examples to support the statement that general assets and investment may be strongly influenced by system specific assets and investment. For instance, the size structure of firms was extremely concentrated on very large scale. Although this was justified with the supposed advantage of economies of scale, it was a necessary condition for proper working of the centrally planned system.

The latter being dominant, large scale was introduced even where and when no technical justification existed. When large scale was technically justified, real scale of firms went often well beyond technically optimal size. The practice to implement very large investments, to give priority to the so-called sector I (basically heavy industry), to carry out large part of foreign trade with other Soviet-type economies, the costly decision making and informational system, and forced growth supply other examples in point.

In all these cases, system specificity overlapped general (technical) features of assets and investment. This fact weakened incentives to general performance, increased costs of control and enforcement and consequently decreased the actual productivity of general investments compared to the potential one. This had important consequences for economic performance.⁵

As in the case of general investment, investment in system specific assets produces systemic capital that accumulates in the economy. Systemic capital is the present value of past investment in system specific assets and its value corresponds to the expected return on system-specific investment performed by economic actors. This (residual) value produces a return - in monetary or financial terms, in terms of real privileges or bargaining power, etc. - that can be considered a proxy for the net value of a position in the leading positions. In the Soviet-type system the many and complex privileges that the *nomenklatura* enjoyed offered a good approximation to the value of systemic capital to their members.⁶

One of the most prominent features of the Soviet-type system is that it was endowed with many system specific assets. In fact, the system was highly structured, rigid hierarchies had a prominent role, and micro-processes were clearly and rigidly subordinate to macro-processes. Under these circumstances, actors needed to perform great investment in system specific assets to find their own place.

They had to learn how the system worked, enter specific organisational setting, learn to use specific productive technology, and had to prove that they were politically reliable. This required that individuals, organisations, and the state/party apparatus invested substantial

⁵ I do not intend to state that the system was always ineffectual on an absolute level or less effectual than any other existing system. Indeed, certain systemic features produced remarkable results, at least temporarily. For instance, the ability of the system to suck potentially existing resources into the production process was certainly remarkable and produced important economic - and social - results for a certain period of time. More simply, my statement means that a relatively large amount of resources was invested to govern the system, to control and enforce rules and commands.

⁶ For simplicity, I do not consider here the existence of externalities of such capital nor the tricky question of who actually pays the cost of control and enforcement. I disregard also the complex questions of the control of systemic capital and the allocation of returns among the members of the *nomenklatura*.

amounts of resources (time, energy, physical and financial resources) in activities connected with political and social control, there including indoctrination.

The most evident component of this activity was the *nomenklatura*. Other aspects were also particularly prominent. The Soviet-type economy was a shortage economy and this required the investment of substantial resources to adapt to that particular environment.⁷ In particular, it was difficult for consumers and producers alike to find the needed goods and services.

Queuing up, joining social networks, and setting up specific structures to produce or procure directly the needed goods and services were particularly costly undertakings that implied acquiring specific knowledge and skills and control general resources. Redistributive activities were particularly important in that system: the state budget centralised (large part of) the income of firms and redistributed it to other activities.

This required that firms invested resources trying to influence the process, often in a rent-seeking way. Possibly the most costly type of investment in system specific assets of a strictly economic nature was investment in the central planning system. Central planning was considered so system specific, that it was the first and global victim of transition in the economic domain.

Investment in system specific assets is important because it requires the use of a certain amount of resources that yield a return in due time. In the Soviet-type system, this return took the form of rights to prestige, power, and specific privileges of the *nomenklatura*, power, professional satisfaction, and good salaries from a qualified job in the central planning structure, individual and collective advantages (or reduced losses) from central reallocation of resources; better plan implementation or monetary profit from the underground economy; various advantages deriving from social networks or connections; purchase of goods and services through payments under-the-counter; and many other ways.

Investment in system specific assets is also important because it influences cognitive processes and hence attitudes, strategies, choices, and goals. From this, opportunistic behaviour, moral hazard and adverse selection may follow. These were indeed very important in the Soviet-type system, particularly in the classical variant.⁸

In fact, agents tended to opportunistically exploit to their own individual advantage the difficulty that the central planner-principal had in controlling the agent's activity and properly measuring her performance and outcome. Agents used various strategies to this purpose, such as hiding and distorting relevant information (e.g. on their actual production capacity) in order to receive easier and lighter plan objectives and make their implementation easier. Often they used the underground economy to this purpose.⁹

Moral hazard was also important. Plan indexes were rather rough and were often expressed in aggregate physical units. Control concentrated on the formal respect of plan orders implementation and bonuses were linked to this respect. There was no in-built way for users and consumers to express their dissatisfaction or refuse inputs or consumers goods. The very features of the shortage economy added further reasons to this behaviour. This led

⁷ Cf. J. Kornai (1980).

⁸ Cf. for instance A. Nove (1977), in particular pp. 87-99.

⁹ Interesting examples are presented by G. Mars and Y. Altman (1987).

agents to concentrate their production activity on the simplest (e.g. strongly standardised goods) and heaviest variants of a product (such as large nails and heavy tractors). Waste of resources and lack of technical progress were serious and inevitable consequences.

Elements of adverse selection also existed - although these were not very relevant in a shortage economy. Actually, there was no real selection either at macro-level - producers were often "monopolies" and never went bankrupt - or at micro-level - firms utilised any input they could. The direct effect of this situation was that motivations and incentives to improve effort and quality were irrelevant.

3. Stability and Efficacy of Economic Systems

An economic system is ineffectual when it is the cause of economic performance lower than could be achieved by using the same amount of actual or potential resources. This statement is roughly testable by comparing the performance of economies belonging in one system (e.g. Soviet type economies) with that achieved by other comparable economies endowed with similar human and material resources but with different economic systems.¹⁰

This situation is created when - for whatever endogenous reason - the system increases transaction costs, originates lack of motivation to use existing resources and economic opportunities as effectively as they might be used, prevents adaptation to a changing environment, hinders and distorts processes of technical and institutional learning and discovery and the diffusion of knowledge and information, causes systematic organisational errors, precludes or discourages the generation of trials and the co-ordination of decision-making processes. Typical examples arise when the system imposes high transaction and switching costs¹¹, favours barriers and hinders competition. In these cases, the effort of economic actors to improve their individual situation is addressed to distributive (and possibly also destructive) activities more than to productive ones.¹²

Inefficacy of the Soviet-type system was manifested in various ways: productive, allocative, dynamic, and X-efficiency. This conclusion is generally considered to hold both in relative terms (i.e. relative to comparable countries with a different economic system) and in absolute terms (i.e. compared to the potential outcome that could be obtained with an optimal utilisation of existing resources).¹³

¹⁰ Another way of testing was suggested by F. Jánosy (1974) and was based on the idea that any economy has a long term potential output to which it tends to return. For an interesting calculation based on this method and applied to transition economies cf. T. Tarján (1996).

¹¹ By switching costs is meant the value of the resources needed to replace in certain circumstances the solution of a particular set of problems or the use of a specific technology employed to solve problems with a different one. Or, as Loasby (1994) puts it, the costs implied by any shift between technologies or connections "when the minimisation of long-run transaction costs requires a substantial initial investment in a particular transaction technology or trade connection".

¹² By production I mean the creation of new valuable assets and related property rights. I also assume that this gives rise to greater social output, although not all acts of creation necessarily increase social well-being and they may also imply the destruction of (allegedly less valuable or valued) assets. By distribution I mean the act of seizing property rights over already existing assets, from which derive alterations in the wealth, income and power distribution depending on the way in which the property rights transfer is implemented. In this case, the consequences for social output crucially depend upon the incentives and constraints on the new owners.

¹³ To be sure, comparisons with Western countries produced a rather blurred picture. Quantitative comparisons of growth rates showed that countries having a Soviet-type system were very dynamic, in particular during the Fifties. Other comparisons using more complex indicators - such as PQLI (Physical Quality of Life Index) - sometimes showed even an absolute advantage over Western countries.

Although the system was particularly effective in increasing the quantity of utilised resources, growth rates of most economic variables decreased dramatically when extensive sources of growth were depleted. This outcome was due to the fundamental features of that system: centralisation and pervading hierarchies, bureaucratisation, lack of motivations and incentives, lack of clear and enforced property rights, poor co-ordination because of bad and incomplete information, inconsistent and weak incentives. However, the system was stable for more than seventy years, in spite of recurring serious crises. Although some changes were implemented, they were insufficient to adapt the system to the great transformation in domestic economies and societies and to the external environment. The situation that dominated until the late Eighties can be defined as systemic stasis.

This stasis raises two questions. First, why did stasis take place? Second, how could an ineffectual system be stable? My hypothesis is that systemic features made the system increasingly ineffectual, in part because of the (limited) economic success of the same system. Economic reforms were adopted to soften or change those limits, but did not solve the problem because of the limits that systemic features put to evolution. However, the system was stable because of a) the stabilising effect of massive systemic capital, b) the difficulties of revolutionary collective action and c) the cost and distributive uncertainty of change. I deal with the first question in this section. The second and third questions are the topic of the next section.

Ineffectual stasis was caused by two different sets of factors.

a. One was the effect of systemic features and the (partial) success of the system. In fact, the Soviet-type system was tailored around the idea of forced growth based on extensive factors as a precondition for building socialism.¹⁴ It was also based on the priority growth of sector I. This strategy was motivated by the Stalinist version of Marxist analysis and the specific circumstances that dominated the Soviet Union since the second half of the Twenties (international isolation, relative underdevelopment, large unemployment, forced industrialisation). The basic systemic features included the necessity to implement central control over economic activity and the soft budget constraint. Control was much easier amidst quantitative processes that repeated through time. Shortage sucked increasing amount of resources into the economy. The very success of this strategy led to the depletion of extensive sources of growth and this destroyed the physical basis for continuing the strategy.

b. The second set of factors for ineffectual stasis included decreasing efficacy of incentives, control, and enforcement due to systemic factors in an increasingly complex economy and external environment. Direct central control of economic activity could be very effective under certain circumstances. A great number of ancient civilisations, war economies, and the first years of the Soviet-type system provided convincing examples. However, conditions were very bounding and included a simple structure of the economy and one or few simple goals that had absolute priority. These could be regulate a great river upon which a civilisation rested (such as ancient Egypt or Babilonia), maximise the war production and effort (as in European economies during World War II) and reconstruction

¹⁴ On the features of forced growth cf. J. Kornai (1973). Here one can remember the definition that Lenin gave of communism: "communism equal Soviet power plus the electrification of the whole country."

and industrialisation in post-revolution Soviet Union. However, success crucially depended upon some conditions. Among these, the willingness of the population to co-operate even with personal sacrifice to reach what was perceived as a common or superior goal and the availability of new (extensive) human and material resources stood out as the most important. Under these circumstances, co-operation among agents replaced competition among them and required modest amount of investment in system specific assets.

In these cases direct control could be efficient and not only effective because it strongly reduced complexity and cost of contracts (indeed, central commands replace contracts), concentrated information and simplified knowledge, and diffused them through vertical channels. If the priority goal was sufficiently simple and the outcome was easily measurable, this institutional asset could substantially reduce transaction costs.

However, these conditions were likely to hold for a short period of time. In fact, social and individual enthusiasm for a superior goal was hardly long-lived. If the effort was successful, the increasing success reduced the relevance of the problem or extensive resources became increasingly scarce and the economy more and more complex. This required more complex and specific contracts, possibly with the help of specialised intermediaries, and had to be supported by more complex, differentiated, and dispersed information and knowledge.

When Eastern European economies reached full employment of existing resources and experienced increasing shortage also on the input side, they were left with no dynamic engine of growth and development. In fact, technical progress - the much publicised and never materialised technical-scientific revolution - never became an important factor of development in economies that lacked proper incentives and motivations.

The only partial exception were the so-called priority sectors - in particular, the military - where external competition was particularly effective. Most services, in particular those serving production, were disregarded and soon became bottlenecks to further economic development. In spite of the tragedies and other costs imposed upon the sector, agricultural production grew, sometimes rapidly. However, product and process innovation was very slow and only minor improvement was implemented in harvesting, storage, and distribution. Low prices of basic staples prompted waste also by consumers who were paid monetary.

Under these circumstances, direct control and enforcement became ineffectual. Either they were unable to manage the complexity of the situation (differentiation of resources, products, and production methods, new individual and social choices, more sophisticated information and knowledge, etc.) and to replace alternative types of control and enforcement (self-interest, moral, ideological, and participatory control)¹⁵ or they became so complex, burdensome and costly as to constraint and hamper economic activity. In Eastern Europe, both consequences materialised. Return to direct control and enforcement were rapidly decreasing. Centralised management of increasingly complex economies required growing investment in system specific assets to strengthen control. Resources to implement those investments had to be subtracted to other uses, because unemployed resources were exhausted and technical progress was slow. Thus, increasing control and enforcement effort created new and substantial transaction costs and negative externalities for production mainly by increasing bureaucratic requirements. As a consequence, return to system specific investments for control were rapidly decreasing and so did return to general

¹⁵ On the important role of ideologies and other "shared mental models" in the economy cf. A.T. Denzau and D.C. North (1994).

investment. Indeed, these problems did not remain unnoticed in Central and Eastern Europe. The reforms that were implemented - first timidly and then more boldly in some countries - attempted to respond just to these problems via progressive decentralisation and delegation of responsibility. Agents became better able to utilise their specific information and knowledge, they had the opportunity to enter decentralised contracts (outside the plan system), and enjoy limited fruits of their activity. However, their economic responsibility did not increase substantially, because their budget constraint remained rather soft on the demand side.¹⁶ Improvement of the economic situation followed - at least in the most consistent and enduring reformer countries - but fell short of what was needed.¹⁷ They did not decrease substantially investment in system specific assets because investment in what one could term as bargaining assets increased. In fact, reforms replaced plan commands with regulation and actors had to invest resources in order not to be disadvantaged by specific regulatory rules and variables - and possibly get some advantages.

This system simplified the so-called traditional branch central administration, but the new widespread regulatory environment required a substantial increase of so-called functional bureaucracy both at central and decentralised level. Actors became more interested in the results of their economic activity, but even more so in the effect of their bargaining activity. In this way and although change was important and positive, the basic institutions and structures of the system did not change much. In particular, vertical distributive functions remained the most important co-ordination mechanism amidst a still rather soft budget constraint.¹⁸

4. Obstacles to Systemic Change

The second question that the stasis of the system raises is: how could the system be stable in spite of its inefficacy? If one supposes that actors are economically rational in the sense that they pursue their individual economic advantage, although amidst incomplete information and knowledge and limited computational ability, one should be convinced that the actors' dissatisfaction with the given system should convince them to act in order to change it. Indeed, many and possibly most actors - people and organisations alike - were dissatisfied with the system.

They knew the many and heavy disadvantages and could compare them to the increasing gap with Western countries. Sometimes people even "voted with their feet" and migrated to the West. However, actors did not co-ordinate their activity and evolutionary change was lacking. When change came, this was of punctuated character and was initiated more by the bold and risky activity of a group of central reformers around Gorbachev than through the decentralised pressure of dispersed actors. The system was centralised also in the governance of change.

¹⁶ Cf. W. Swaan (1993).

¹⁷ "What was needed" is a very general - possibly generic - expression. This is a complex topic that involves not only systemic and institutional considerations, but also development ones. Reforms changed the goals pursued by these economies and also opened them to contacts - and consequently comparison - with Western economies. The latter were much more developed also because they were usually more developed before the Soviet-type system was implemented in Eastern Europe. Consequently, one can suppose that some kind of demonstration effect started to operate after the reforms, to the disadvantage of Eastern European countries.

¹⁸ J. Kornai (1986), W. Swaan and M. Lissowska (1996).

Were decentralised actors in Central and Eastern Europe irrational, after all? My contention here is that they opposed change just because they were (boundedly) rational and that a set of conditions had to accumulate and reach a critical mass before change could be actually set in motion. Until that critical mass was not reached and if one considers the obstacles and costs to systemic change, the individual advantages from operating in the old system were greater than the potential but costly and risky advantages that actors would have gained from change.

Systemic stability depends on a set of internal and external conditions that make the system more desirable than others or that prevent change. This may be so because the present system is more desirable from some point of view, because the expected distributive outcome of systemic change is less desirable than the *status quo* at least to some privileged group of actors (in M. Olson's sense), because external factors prevent change, or because the costs of change are too high. In the present section I deal with the three former reasons. I will discuss the last one in section 7.

A. A system may be more desirable than any other from some specific point of view, even if it is economically less effectual. This is so whenever the goal(s) that a society or a powerful privileged group pursues through the given system are considered to be superior than general economic efficacy. One can find six different reasons - that I discuss in random order - why the Soviet-type system was in such conditions for a rather long period of time. During that period, these factors gave legitimacy to the system.¹⁹

a) Ideology had a great importance in the system after the victory of the October Revolution. Indeed, the victorious revolution legitimated such prevalence and its promise of a bright future for everybody. Under these circumstances, it is likely that most people agreed to wait for the test of time over those promises. This gave the system a period of time during which it remained unchallenged or weakly challenged. The strong role of mobilisation ideology also had the advantage of reducing transaction costs and strengthening incentives: when actors are convinced of the future advantage of a given situation, they may be willing to operate out of altruism, ethic, social, and political motivations.

b) The new system was based on the principles of socialism that promised social justice and equity. In Soviet Russia first and the Soviet Union after, it also had the advantage of being strongly based on Russian tradition, institutions and structures.²⁰ These facts gave the system a great appeal in large groups of the population, favoured the mobilisation and co-ordination of resources and activities, and decreased transaction costs.

c) The backwardness of pre-existing economic situation in many of the countries concerned, the poor performance of the previous (non Soviet-type) system, and the consequences of the war attributed high priority to reconstruction and catching-up. The new system promised to implement these goals and during the first years it appeared to keep this promise.

¹⁹ I discuss here the situation prevailing in most of the Eastern European countries. The features of the most developed ones among them - particularly Czechoslovakia and Eastern Germany - were certainly different, but were more an exception than the rule in the area.

²⁰ Cf. T. McDaniel (1996).

d) The system offered material and social advantages to privileged groups, but also to many ordinary people. It created a new *nomenklatura* that conquered many privileges - particularly in the allocation of power - that previously belonged to relatively closed classes. The new *nomenklatura* was open in the sense that no conditions of lineage or wealth were needed to enter it so that potentially everybody could enter it, although it was certainly closed as a group of power. Ordinary people could enjoy limited advantages deriving from the expropriation of the previous owners and holders of good jobs, the disappearance of open unemployment, modest labour intensity, and basic consumption standard. Also general education, retirement privileges, and health care introduced great improvement for ordinary people, in particular in the less developed countries of the area. All these factors may explain why trade-unions opposed economic reforms.

e) International isolation, closeness, and external menace were also factors that supported systemic stability. In fact, people living in a country with an economically ineffectual system have neither the possibility of properly comparing their situation with other countries - either via the consumption of foreign goods, or via tourism or cultural exchange - nor they have the possibility to emigrate. It also strengthened the government, that was seen as a fundamental co-ordinating factors in the defence from an actual or potential external menace. This helped to keep political and social stability and contributed to avoid the economic difficulties that a strongly negative balance of trade, emigration or brain drain could provoke.

f) Since the very beginning the Soviet-type system was characterised by strongly centralised political and administrative control over the society, politics, and the economy. This rested on the overreaching power of the only party and its political and social structures and its long and powerful arm, the police. In the countries outside the Soviet Union also military occupation by Soviet troops or the Warsaw Pact forces and economic menace (e.g. of cutting energy supplies) served as a powerful stability factor.

The above factors of stability required a great amount of investment in systemic specific assets. This included the investment needed to establish the power of the extended machine of the party and to run it, the investment needed for setting up and running central planning, implementing the widespread distributive functions required by the declared goals of socialism, substituting efficient international economic exchange via autarchy, and the investment needed to adapt general assets to the existing system (e.g. the greater cost of large industrial projects over alternative solutions). Indeed, some of this investment could have favoured a productive outcome by improving incentives, strengthening motivations, or making human resources better and more productive or by decreasing transaction costs. However, these potential advantages materialised only in a limited way because of the other features of the system, such as bureaucratisation, lack of competition, lack of incentives for technical development, the costs for keeping international defence and isolation. It also spurred and spread underground economy that strongly increased transaction costs of legitimate activities (e.g. in the form of queuing up, forced substitution, thefts).

One disadvantage of great investment in system specific assets is that adaptation to changing environment may be more difficult, because this investment renders the system more complex, resilient, and rigid. This was particularly true in the Soviet-type system, because investment in system specific assets was largely co-ordinated and controlled at central level. Decentralised operative agents has mostly to adapt passively to central

decisions. Another consequence I will discuss later is that systemic change may be very costly in these circumstances.

B. A second reason for systemic stability is that the distributive outcome of systemic change may be less desirable to all actors or some privileged group than the *status quo*. This is an important case of collective action failure that may contribute to keep the system even when its inefficacy is revealed. The latter may take place when one or more of the above mentioned conditions relax and inefficacy is revealed by, for instance, inter-systemic comparison made possible by the opening up of the society and the economy. Apparently, in this situation a more effectual system can be implemented, for instance by means of a social contract to change the system and possibly the compensation of the few losers. However, given the system-specific character of much investment and returns, such spontaneous and decentralised collective action may not succeed and the inefficient system is stable, for three reasons: a) inter-temporal differences between investment in system-specific assets and returns; b) interpersonal and inter-organisational differences from the point of view of investment and systemic capital deriving therefrom; and c) interpersonal and inter-organisational differences in the allocation of opportunities, costs and advantages of systemic change.

a) Because of the inter-temporal discrepancy between investment and the maturation of returns, rational individuals and organisations may prefer to preserve the system in which they have invested if the opportunity cost of systemic change is high for each actor or their time horizon is short. This is so when the individual cost of systemic change plus the lost expected return to old systemic capital is higher than the discounted value of expected future return to the new investment in system-specific assets net of the costs of such an investment. Many managers opposed reform just out of such a calculation.

Generational factors have strong influence here. Those actors who invested for longer time and who have a shorter time perspective to recover their return are likely to oppose change. In fact, even when change promises to produce great returns they may have insufficient time to take advantage of this. However, elder actors may occupy the most important niches in the power and economic structure. This is particularly so in a rather rigid and stationary system as the Soviet-type system was. Elder individuals occupied the “commanding heights” of politics, the society, and the economy. Indeed, the opposition to reform by elder people and organisations they controlled in former Soviet-type system has been well proved by various opinion polls and sociological surveys. This was true in the period of economic reforms, during Gorbachev years, and when systemic change was set in motion.²¹

The fact that many actors are risk adverse strengthens generational problems and shortens the actors' time horizon. Under these circumstances, rational actors oppose change. Consequently, systemic change may be successful only if it may extend the investors' time horizon or if a privileged group with longer time horizon prevails. This happens when actors become convinced that - for whatever reason - systemic change promises a high rate of return and low sunk costs of system-specific investment or promises great increase of the rate of return to general investment via increased economic efficiency and reduced cost of control and enforcement. Also credible third party enforcement is necessary to reduce uncertainty. Difficulties encountered in implementing these conditions may create loyalty

²¹ H. Smith (1990) supplies various interesting information and evidence in this sense.

to the old system and give voice and exit a weight that is respectively directly and indirectly proportional to individual actors' investment.

Because of inter-temporal differences between investment and returns, and disregarding moral and ideological factors and state enforcement, non privileged individuals and organisations have scant interest in systemic change. This is because of the implicit loss of their past investment in system-specific assets and of the returns to it, because of the private costs of systemic change which may be individually considerable, because of the potential paucity, uncertainty and tardiness of the returns on such new investment, and also because systemic change may imply loss of general capital (e.g. via change of technology or international competition). Also, a prisoner's dilemma mechanism (deriving from the uncertain division of private costs and distribution of - often public - advantages) may delay or stop their action and lead to free riding. As envisaged by Mancur Olson, in these circumstances a small privileged group can easily undertake successful collective action in pursuit of its common interest. This may produce failure to change.

b) A second conservative factor is that there exist interpersonal and inter-organisational differences of investment. This refers to both the residual value of past investment in system specific assets, namely systemic capital (and of general investment and capital), and the specific features of that investment (in particular, its sunk character). Such differences derive from different opportunities that actors have had to perform investment in system specific assets and from the different productivity of such investments and the externalities they produce.

The Soviet-type system presented a clear division among those actors who invested extensively in system specific assets and those who did not. Individuals who invested most in the former sense were included into the *nomenklatura* or were in a good position to enter it. Organisations were run by powerful members of the *nomenklatura* and enjoyed priority - legally because members of priority branches or *de facto* through bargaining power coming from connections - in the allocation of resources. Being in a privileged position thanks to past investment imposed great duties and also costs of loyalty. However, it also granted great advantages because a modest amount of additional investment had great productivity in terms of returns and also produced important externalities. For instance, *nomenklatura* members had access to the most important leading positions in the economy and other fields and usually enjoyed various material privileges (housing, vacations, travels abroad, supply of goods and services in shortage). Their children entered more easily the university and had open their way to the best and most important jobs. Organisations that enjoyed priorities found it easier to implement plan orders and consequently gained the rewards that were linked to this. Usually the "ratchet principle" also worked on the input side: once an organisation enjoyed priority, it obtained privileged access to inputs also in the future. It was certainly submitted to formal discipline, but its strong position in the system was usually sufficient to avoid inspections and other troubles. An important organisation could successfully resist even a ministry.

Interpersonal and inter-organisational differences in system-specific investment create a group of actors actively interested in preserving the existing system. In fact, the latter grants a part of actors substantial individual and group advantages that derive from the asymmetric distribution of systemic capital. Systemic change would impose upon them important losses. These are equal to the value of their present privileges (the capitalised value of the expected

returns on their systemic capital) plus unrecoverable capital losses plus the negative capital they would obtain by systemic change (e.g. in the form of social or political ostracism). To this one should add the expected cost of new systemic-specific investment as a necessary component of the process of individual adaptation.

As a consequence, actors' choices and actions are non convergent, because they are based on subjective models derived from systemic capital which differs among individuals and organisations and changes over time as a function of the investment. Capital and investment may even have divergent effects, in the sense that they may increase differences among the positions of actors because of spillovers and externalities. The above mentioned factors may prevent the development of a socially efficient convergence of subjective models and, as a consequence, of socially efficient spontaneous co-operation. Thus the ineffectual system is able to survive.

One can find various examples of such failure of collective action in Soviet-type economies even before transition. Economic reforms were implemented since Stalin's death, but always met strong opposition in part of the privileged groups. Main supporters of reform were usually those actors who had the longest time perspective or who invested most in general capital. They were usually top leaders and the most powerful structures in the party and the state. They were those actors who actually controlled the system or who expected great advantages from the reform (such as firms that had particularly great trade with the West). Their strong position offered them the opportunity to support the (social) investment of resources in order to get a greater social return in the long run. Their motivation was the expectation that the decreasing efficacy of the system would also jeopardise the productivity of their systemic capital and its value. Subordinated actors usually had a shorter horizon: they had to afford great costs of change and adaptation and they did not expect a sufficient return in the short run. Therefore, they usually opposed change. Among the latter, most firms, trade unions, and the rank and file of the party and the state machinery stand out.

Indeed, the former group had powerful instruments to impose its own decisions and will, instruments that were an important part of the actors' systemic capital. However, the latter group could easily resist in a covert way and even boycott those efforts. The history of economic reforms offered abundant examples of this fight. It is interesting to note that in those countries where the relative weight of almost pure systemic capital was reduced in some way (e.g. through popular uprising, such as in Hungary and Poland) or was never particularly high due to the survival of traditions privileging general capital (e.g. in Czechoslovakia) economic reforms could better go through and be effective (or were stopped by external intervention). However, this required a long period of careful preparation and progressive transformation before it was possible to start a consistent package of reforms.

For instance, it is interesting to note that Hungary was among the first countries to attempt a comprehensive reform of the economy. This was done by the Nagy government in 1953. The 1956 revolution - although defeated - removed the old powerful Stalinist guard and destroyed their systemic capital that was used to block reform attempts. A long period of careful reforms started already in early 1957 and continued for a decade. However, a comprehensive and rather consistent and radical package of reforms was only introduced in 1968, the last one among Central and East European countries. Opposition to the reform

was strong, but the long preparation gave time to many actors to adapt by investing in a reformed type of system specific assets. Consequently opposition and resistance was unsuccessful in stopping the reform, although it was successful in delaying its implementation and changing some of its features.

c) The ineffectual system may be stable also because actors realise or believe that there are interpersonal and inter-organisational differences in the allocation of opportunities and advantages of systemic change. I will discuss the costs of systemic change in section 7, but it is necessary to briefly present here a few questions concerning their allocation. One important limiting factor is that few opportunities to perform major system-specific investments arise during an actor's lifetime, for two reasons. First, system specific investment requires great amount of resources that are used to set up specific structures, to start great and prolonged effort of system-specific learning, and to establish social relations. Second, individuals and organisations acquire social and economic reputation through their investment.

Both kinds of investment and systemic capital deriving therefrom have largely sunk character. In fact, if the system changes, individuals and organisations lose their specific capital and also the value of much of their general capital decreases. Along with this, agents must afford new system specific investment and must invest valuable resources to adapt their general capital to the new systemic setting. In fact, a flow of new resources is needed to set up new system specific structures, to start great and prolonged effort of system-specific learning, and to establish social relations. Other resources are needed to restore the agents' social and economic reputation. In the former case, actors suffer the loss of a stock, in the latter they must afford a flow of additional costs. The real value of these actions is unknown *ex ante*, because it depends on institutions and structures that will actually characterise the new system. These are unknown because they result from a complex set of factors - there comprising the outcome of many bargaining games - that are not under control of individual actors. In this situation, rational actors who invested in the existing system would use their systemic capital to block change, unless they have a guarantee that the new system will preserve their systemic capital or permit its conversion in new systemic capital. If so, systemic change is path dependent. Another possibility is that the re-allocation of property rights on general assets favours the owners of old systemic capital. This point will be discussed later in section 7.

However, lack of knowledge, wrong information and perception of the specific features of the process of systemic change and the new system or the actors' actual position within it, patterns of loyalty, ideology and propaganda, altruism and social pressure, and the use of the actors' bargaining power are all factors that may attenuate opposition to systemic change and reduce its costs. In fact, these factors may induce actors to overvalue the returns of the new system, to undervalue the costs of change, to trust that an authority may pursue equity goals, or to reach an agreement with other actors on a more equitable allocation of costs and advantages. All these factors were strongly embedded in the Soviet-type system and explain why reforms were implemented and systemic change took place. However, they also explain why open resistance to change was weak, but hidden resistance was strong indeed.

C. A third reason for systemic stability are external factors that may prevent change. This was the case of all Soviet type economies except larger ones (the Soviet Union and China)

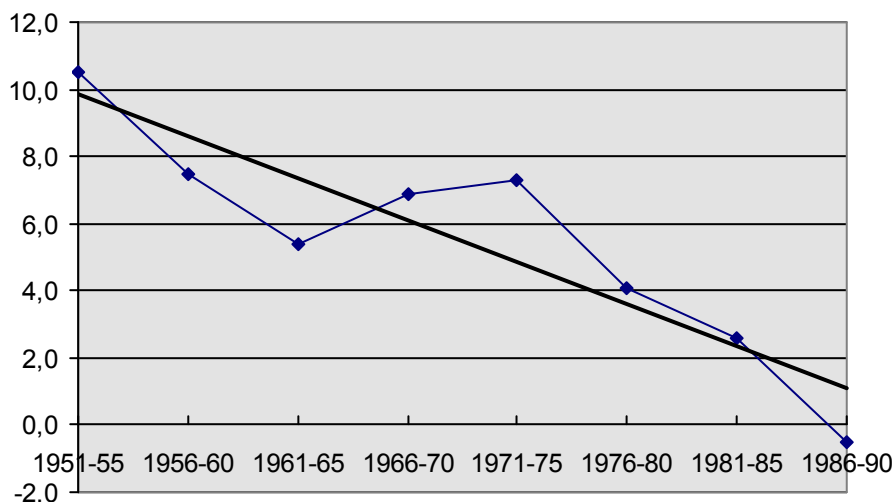
and Yugoslavia. This limit became particularly clear in the 1968 invasion of Czechoslovakia by the troops of the Warsaw Pact. Other examples were provided by Hungary and Poland in 1956.

5. The Determinants of Systemic Change

There may be various reasons why a system starts a process of disruption and change. One possibility is certainly that actors become aware of the existence of a superior system. If this system already exists in some countries, the process of change may appear easy. However, this is seldom the case, because one system is hardly superior to another one in all senses and for each actor. Consequently, - and in section 4 I have proposed different reasons why this is usually so - the old system is resilient and systemic change difficult. In general, two sets of conditions are needed for successful systemic change. First, the appeal of the old system should decrease for whatever reason. Second, a new system - existing in reality, such as the capitalist system of the West, or just as a blueprint, such as socialism at the outbreak of the October Revolution - should be known as or believed to be superior and represent the target of systemic change. In Central and Eastern Europe both conditions held at the end of the Eighties. Both factors should hold at least for the leading privileged groups in the country.

A general important factor that explained economic reforms in the Sixties and attempts at a new wave of radical reforms in the Eighties was the rapid fall of growth rates and of general economic performance in Soviet type economies (see chart 5.1). This gave reformers a strong push to try to change the system.²²

Chart 5.1. Yearly growth rates of NMP in Eastern Europe (unweighted average) and linear trend.



²² A very useful reading are the books by Gorbachev (1987) and Aganbegyan (1988).

Among the most important factors that fostered the need for change one can mention the following. The partial economic success of Central and Eastern European countries and the growth of a new middle class, the inability to catch up with the West, the generalised welfare system with all the rights attached to it, the rapidly decreasing labour discipline, the mitigation of external threat thanks to the policy of *détente*, the progressive opening of those economies and societies to the world economy and society imposed a progressive change of goals and means.

The traditional goals of building socialism and forced growth became less important, ideological purity lost strength, paternalism replaced fear of absolute power of the party, labour shortage superseded unemployment, defence was less dramatic a goal, police power was decreased and law acquired greater importance, some press freedom appeared, consumption goals came to the forefront, economic competition and co-operation came alongside with a more complex and technologically sophisticated military and ideological competition with the West.²³

People increasingly saw the West as a potential partner and its level of development as a goal more than a potential or actual enemy. As a consequence, the Western economic system was increasingly seen as something to imitate or even adopt. These factors increasingly undermined the basis of the social and political contract that came out of the October Revolution and - in a weaker way - the end of World War II and the Red Army occupation.

As a consequence, also the means to run the system had to change. Efficiency and technical progress increasingly replaced the mobilisation of resources both as means to promote growth and to finance a general and burdensome welfare system, agreements with Western firms and countries greatly expanded in number and importance, limited autonomy of firms and bargaining with planning authorities took the place of rigid hierarchies. However, the system was ill equipped for using these means, as explained above. Major consequences were progressive decrease of growth rates to stagnation, growing shortage (at least relative to demand), and widespread underground economy.

The increasing wedge between changing goals and ill suited and rather ineffective means opened great opportunities that systemic entrepreneurs could catch. However, a necessary precondition was investment in systemic change. This investment created positive externalities for imitators, thus reducing the investment that other actors had to make in order to adapt to the new system and decreasing the cost for those who wanted to convert their old systemic capital into new one. These were typically those actors who invested in old system specific assets with limited sunk costs. These actors could convert their old systemic capital into new systemic capital or into general capital at limited costs. However, this typically took place only when the effort of systemic entrepreneurs reached a critical mass and systemic change was perceived as imminent.

²³ H. Smith (1990, pp. 184-185) depicts this evolution in the following way: "For decades, the mass output of the Soviet system, especially its concentration on military might and production, masked the inefficiencies of the system. The Stalinist command economy could concentrate enormous national resources on showpiece targets - huge hydroelectric dams spanning great rivers, massive steel plants, machine-tool factories that turned out tanks for the Soviet army in World War II - all built at the cost of enormous sacrifices by the people. During the early Stalinist years, the masses were motivated by the romance of building a New World. The war against the Nazi invaders summoned Russian workers to a great patriotic effort. Finally, the fear of a demonic dictator drove the people. But once Stalin was gone, and as the postwar years rolled by, the Soviet work force sagged into a now legendary pattern of sloth and shirking."

Because of investment in system-specific assets, those who wanted to destroy the old system had to invest great effort and resources to do so, thereby reducing for them the rate of return on system change. However, the resources invested to defend the old system (such as closer control over those who invested in system change and in general assets) rendered even the latter less effectual. In fact, these resources could only be subtracted from productive use, thereby making investment in both old system-specific assets and general assets less profitable. These two factors could induce rational actors to find an agreement on systemic change involving compensation for the losers - or else costs and advantages sharing.

However, this took place only in part because some actors - in particular those who gained most from the old system - had or were convinced of having valuable systemic capital that could not be converted in new systemic capital. In case of systemic change, their only valuable systemic capital was their ability to stop it in the first stage. The stronger the pressure for systemic change, the greater was this value. Rational systemic entrepreneurs promised to compensate losers in a credible way. Credible state enforcement was necessary to this end, because one of the parties lost retaliation power essential for the development and stability of spontaneous co-operation when systemic change was successful.

The agreement to compensate the losers could be found when two conditions held. First, investors in old system-specific assets considered the present value of the compensation to be at least equal to the present value of expected returns on their investment in old system-specific assets net of the costs required to defend that investment should the system remain unchanged.

Second, investors in systemic change realised that the value of the compensation that they paid to losers was not greater than the net present value of their future returns from the new system net of investment in systemic change. However, both parties could accept to receive or pay a compensation lower than the one defined above, when they perceived that their investment in systemic change or old system specific assets was at risk because of the danger of free riding of someone from their own group. In fact, this event would decrease substantially their power as a group. However, pervasive uncertainty of systemic change could decrease further expectations and requirements of both groups.

An indirect way of paying compensation was to allow owners of old systemic capital to transform this - before systemic change took place - into general capital (e.g. ownership of firms, sums of money deposited in foreign banks). Typically, these decisions were spontaneously implemented by the owners of old systemic capital before the value of this capital was destroyed by systemic entrepreneurs. This decreased the value that systemic entrepreneurs could appropriate and consequently the rate of return to their investment.

Both situations arose in Central-Eastern Europe on the eve of transition, when "round tables" between the government/party in power and the social opposition were organised and when "spontaneous" privatisation took place. As a result of these agreements, the old holders of power were granted or directly captured some privileges. A typical case was spontaneous privatisation. Managers, politicians and directors in the old administrative and political machine used their control over assets to convert it into ownership of specific

industrial assets. The state, workers and the population were expropriated of property rights they enjoyed in the past.²⁴

In Central and Eastern Europe, the resources that were utilised to set up the Soviet power structures and that many Soviet citizens invested to enter the Soviet *nomenklatura* and other privileged organisations were jeopardised when the system changed. Less difficult, but still negative, was the situation of those endowed with system-specific technical skills. Those who managed to enter the socialist bureaucracy (like the planning machine), for example, lost their past investment and the returns they used to enjoy from that.

To be sure, bright individuals and organisations were able to convert their old capital so that they could enjoy substantial returns in the new system. This they were able to do by exploiting still valuable assets like personal connections and networks and the specific knowledge and skills accumulated in the old system, when they occupied positions which have become strategic during transition.²⁵ This was particularly the case of the managers of enterprises about to be privatised, and part of the intellectual professions. But this was also true of political organisations: for instance, the successful case of *Komsomol* (the Communist youth organisation in the Soviet Union) and its leaders is particularly relevant in this sense. According to a sociological survey in Russia some 61% of the business élite is made of former *nomenklatura* members, mostly former managers or *Komsomol* members.²⁶ The rest is mostly made of young people, although many of them are probably the children of the old *nomenklatura*.

6. Systemic Change

The main conclusion of the above analysis is that systemic capital in Soviet-type economies was particularly relevant in both absolute terms and relative to general capital. Under these circumstances, systemic evolution was difficult because the system was rigid to internal, technological, and environmental change. The consequence was a long period of stasis during which systemic efficacy worsened. Indeed, various attempts at reforming the system were implemented, but they largely failed, with the only partial exception of the Hungarian reform. Such a stasis increased the wedge between systemic abilities and capabilities on one side and the requirement that derived from the environment, the exhaustion of extensive resources, and the society on the other side. The widening wedge increased the cost of control and enforcement that was imposed upon owners of general capital. Hence return to the latter were depressed.

²⁴ Cf. É. Voszka (1996).

²⁵ Anatoly Chubais, the former responsible for Russian privatization, gave a good example in his statement on privatization in *Izvestiya* on December 6, 1995: "Distribution of property rights in Russia, ..., like by the way also in other countries, takes place in proportion to existing power elites." (quoted by P. Sutela, 1996, p. 40). C. Freeland (1997) provided an interesting account on latest developments in Russia: "...the end of communism has not produced the results that many reformers hoped for. One reason for this is the influence of Russia's new oligarchy, the group of seven financiers which funded and organised the successful re-election campaign of Mr Boris Yeltsin, the Russian president. As a reward, it has emerged as the dominant political and economic force in Russia over the past few months. Its members have been showered with the best government jobs and the most valuable of the country's state enterprises... they have focused on milking the state through cheap credits, non-transparent privatizations, or tax breaks. The state, which under tsars and commissars held Russia in its steely grip, is too weak to collect taxes systematically or enforce its own laws. As a result, it is being parcelled out among thousands of private interests."

²⁶ Cf. O. Kryshankovskaya and S. White (1996). In the political and government arenas, the presence of former *nomenklatura* members is even greater.

This discouraged productive activity and depressed the accumulation of general capital. There were escape routes indeed, such as emigration and the underground economy, but these did not reverse the situation.

Worsened systemic performance opened up opportunities to systemic entrepreneurs. Systemic entrepreneurs were the agent of change who could and decided to respond to the new conditions by investing in systemic change.²⁷ They were pushed into such action by the incentives and opportunities embodied in the systemic framework. These constituted the expected return on their investment and consisted of the differential social or individual returns on either their general capital or on their new pure systemic capital. When they were successful, imitators followed. Once a critical mass of pressure to change was reached and overcame the resistance of conservative actors based on their old systemic capital, change happened in a punctuated way.

In Central and Eastern Europe there appeared different groups of systemic entrepreneurs. Reformers who attempted to modernise the Soviet-type system since the death of Stalin were certainly such systemic entrepreneurs. They mostly limited their activity to the economy, because the overwhelming systemic capital of conservatives was concentrated in the political sphere. Quite different was the situation at the end of the Eighties, when a substantial part of investment in systemic change was implemented in the political heart of the system.

The decreasing performance of the economy weakened the legitimacy of the political system and devalued systemic capital by decreasing its expected return. This was further jeopardised by the prolonged political instability and uncertainty due to ageing and sick leaders (in particular, the long illness of the late Brezhnev, and the brief reigns of Andropov and Chernenko in the Soviet Union) and unrest in some countries (in particular, in Poland). The system still produced expectations based on its proclaimed goals and past performance (strong defence, high welfare standards, increasing consumption, catching up with the most developed countries), but was unable to provide proper motivations and incentives to actors who were supposed to implement those goals. Many examples of disaffection from the goals of the system appeared and became increasingly important. The increasing gap between expectations and reality urged many scientists and intellectuals to ask for systemic reform or change. Scientists and intellectuals started to invest in systemic change by studying these problems and setting up structures (research groups, discussion forums, publication networks). Blueprints for systemic change were worked out, circulated, and discussed.²⁸

However, real change came when a new, powerful group of systemic entrepreneurs appeared at the heart of the system. This was the group around Gorbachev who acted as systemic entrepreneur and implemented the decisive investment in systemic change that involved the entire society. Indeed, this group was very prudent and traditional in the measures that proposed at the beginning. Such measures (e.g. the anti-alcohol campaign and the anti-corruption campaign) were addressed not to change the system, but to improve its working through greater labour discipline and more honest functioning of the state and

²⁷ Here the term entrepreneur is used in a fashion analogous to William J. Baumol's (1993) to denote any actor whose non-routine activities are intended to innovate or change the economic system in a way that may be socially productive, but also destructive or rent seeking.

²⁸ The best known among these was the so-called Novosibirsk Report prepared by a team of social scientists co-ordinated by Abel Aganbegyan and Tatiana Zaslavskaya as early as 1981. Cf. NR (1984).

party structures. However, *glasnost* and *perestroika* were launched soon as basic investments in systemic change.²⁹ The program for restructuring the economy (*perestroika*) was adopted by the Communist party in June 1987 as its official line. The government worked out and (half way) implemented plans that were openly addressed to change the system. This happened in an increasingly radical way.³⁰

Following these developments, investment in systemic change reached a critical mass. Although resistance was strong, it was most often only indirect and the action of these systemic entrepreneurs fostered imitation. Indeed, they invested a great deal of public resources to this end. Imitation destabilised the system well beyond the intention of original systemic entrepreneurs and this went on until the old system was destroyed.

At the same time, the bold reform activity in the Soviet Union and the statement made by Gorbachev that the Soviet Union would not interfere in domestic matters of other countries had great consequences in all Central and Eastern European countries. In fact, it created important externalities that strongly eased the work of imitators elsewhere. As a consequence, the amount of investment in systemic change dramatically decreased in other countries.

Imitators, both domestic and abroad, had the fundamental role of diffusing systemic innovation, thus making it irreversible. Indeed, most actors were unwilling to invest spontaneously in systemic change, because this imposed private costs (beginning with the loss of old systemic capital and the returns deriving therefrom) in exchange for a (future and uncertain) public good (a new and allegedly more productive system). In this case, it was more rational to wait until the system was changed and invest in new system-specific assets, because this was a cost that promised a private return in a reasonably short time, or to capture increased return to general capital.

However, there was more than that at stake in systemic change. Investment by systemic entrepreneurs in systemic change, the activity of imitators, and the possibility of converting old systemic capital into new one, modified the distribution of property rights over existing assets and consequently the structure of relative prices, incentives, opportunities, and the bargaining power of actors. This altered the present value of systemic capital, because it changed the value of the flow of future returns, and in general determined the distribution of transition costs.

This outcome could be a necessary condition for producing a more efficient social and economic structure, if the new distribution of property rights was to the advantage of a more productive social and economic group. However, this was not necessarily so, because of the asymmetric opportunities of social and economic actors to influence outcomes. Such asymmetry could derive from pre-existing asymmetries or from investment or different application of law and regulation in different regions and for different types of agents. This

²⁹ For an excellent account of the evolution of Gorbachev's action cf. H. Smith (1990).

³⁰ These plans included Academician and deputy prime minister Abalkin's program for transition to a mixed planned market economy (November 1989), Prime minister Ryzhkov's program for a regulated market economy (May 1990), Academician Shatalin's program for transition to a market economy (the so-called 500 days program, August-September 1990), the anti-crisis program approved by the Supreme Soviet and presented by Prime minister Pavlov (April 1991), Yavlinsky's program for transition to be implemented in six and a half years.

outcome also decreased the actors' computational ability because it strongly increased uncertainty.³¹

In fact, the value of transition to individual actors was the increased net value of their systemic and general capital that originated an increased flow of income there considering the effect of transition of the discount rate of different actors. This was strongly influenced by the re-allocation of property rights on assets. A great amount of resources were needed to measure these new features, and additional resources were required to define and measure the rights that were transferred, to enforce contracts and to co-ordinate the different and diverging choices of actors. However, when the economic system changed, its co-ordinating and constraining functions were missing: old ones were destroyed or were ineffective and new ones were only developing. Therefore, it was impossible to determine the market value of property rights correctly, because it was impossible to establish the actual flow of income that assets could produce in the new circumstances, and it was difficult to enforce rights until the new system had been stabilised. Consequently, the opportunity to gain rights, wealth and income through distribution, by devoting resources to information control, by exploiting networks and colluding with those who had invested successfully in systemic change and control the restructuring of property rights, and by bargaining with the third-party in charge of enforcement, was ever-present, and it was the greater the more radical was systemic change.

This made enforcement a fundamental component of transition, but it was all the more difficult and its outcome uncertain. This concerned in particular the role of the state:³² it was fundamental, but the old state structures were disrupted and the new ones were just being established. Establishing the new structures of control and enforcement was a costly and time consuming process, much longer than processes of transitional distribution. The new state could only give some order to the processes that developed outside its regulation. The same conclusion holds for private enforcement structures and institutions.

Asymmetries and uncertainty rendered profitable investment in transitional distribution a low risk, very effective and individually productive way to avoid the public good trap and capture the positive externalities created by systemic entrepreneurs. Transitional distribution consisted of the redistribution of property rights over existing general assets (like the ownership of firms and real estate) or new system-specific assets (like positions in the new government, political parties or privatisation agencies). In fact, those who invested in the old system-specific assets that continued to be socially or economically relevant (like personal connections and specific organisational or administrative knowledge), or which enabled investors to control the technical components of the economy (like a firm), may be particularly effective in converting their old systemic capital into new capital, and they may even enjoy positive externalities from systemic change. This opportunity facilitated systemic change; but it gave such change continuity with the old system, and sometimes had socially negative consequences for the efficacy of the new one. In fact, in these circumstances, the prevailing selection criteria for investment were not its socially

³¹ The destruction of old systemic capital and transitional distribution could have profoundly negative consequences also in social terms: "...such a full-scale rejection of national experience and culture will only deprive leaders of a wealth of historical experience, deepen the cleavages of society, and exacerbate the crisis of morality that, in Russia, has turned out to be one of the main impediments to the creation of Western-style capitalism." T. McDaniel (1996), p. 178.

³² Cf. B. Dallago (1996) and the literature quoted therein.

productive outcome, but the potential distributive advantages that accrued to individual investors.

There are many examples of this kind of behaviour in Central and Eastern Europe. Many managers of state-owned enterprises and also middle and high ranking party officials became owners by utilising their bargaining power, knowledge, and skills accumulated through investment in old system specific assets.³³

This was in particular the case of the already mentioned spontaneous privatisation that preceded transition in Central Europe and of insiders privatisation in Russia, Ukraine, Serbia, Croatia, Rumania. Other relevant cases were that of former state administrators who entered privatisation agencies and of previous administrators or managers who were able to obtain legally or illegally the funds necessary to establish their own private businesses before abandoning their old jobs. This was a widespread phenomenon that explains the origin of great part of post-transition owners and entrepreneurs.³⁴

Actors able to influence the variability of particular attributes were able to influence transitional distribution to their own advantage. In this way, they influenced the allocation of property rights, the income flow that assets produced and the actors' discount rate. Consequently, they depressed the value of assets and capital both directly and by increasing uncertainty.

Therefore, it was easier and less costly to capture those assets for those advantaged in the ownership or political structure, in the use of violence, and in the informational and bargaining game, who become residual claimants over those attributes. This they did without bearing the (full) cost of their action.

These were, for instance, irregular or criminal actors, old politicians, managers or even workers. There were various cases and examples of this kind of behaviour: the value decreasing effect of the activity of the old system agents is well known in both market economies (e.g. the so-called "paradox of privatisation) and transition economies (e.g. decapitalisation of enterprises and interenterprise arrears).³⁵

To summarise, during systemic change there was a very great amount of contestable income stream from, and value of, most assets. By increasing uncertainty, this shortened time horizons, made rational calculation impossible, fostered transitional redistribution. As a consequence, rational actors tried to capture some part of that contestable value and income stream. However, when the system was changing and selection criteria were unclear and mutable, there was no guarantee that wealth or income was captured by the socially most productive actors. Indeed, the main advantage often accrued to those actors who owned old systemic capital that was still valuable and strategically important and

³³ "In becoming private owners, they [the new fused economic-political elite] used their privileged access to information, their dense networks of ties, and their knowledge of how the system worked to consolidate a dominant position in the new capitalist economy. The new elite, with roots in the old Communist nomenklatura as well as in the private sector that began to prosper under Gorbachev, was immune to control from above and below." T. McDaniel (1996), p. 164. "...although in many ways 'private', the new economic elite that had begun to assert itself in the late Gorbachev period was not, ..., really a capitalist class in the classical sense. Its rights were still defined as much by its political power as by its ownership of property. It did not have to act by market principles but could continue the closed monopolistic practices inherent in the Communist system." (*ibid.*, p. 171).

³⁴ Cf. the examples quoted in B. Dallago (1997).

³⁵ On the role of criminal actors during transition cf. G. Grossman (1995). On such phenomena as decapitalisation of enterprises and interenterprise arrears in transition economies cf. F. Coricelli (1996).

invested in transitional distribution. There was no guarantee of positive and spontaneous social productive outcomes. This was the more likely, the more relevant was old systemic capital relative to general capital and the more system specific was general capital.

Transitional distribution was not necessarily and entirely negative. In fact, it gave powerful incentives to imitators to implement systemic change. However, it influenced the features of the new system. These features strongly depended on the nature of the new (formal) institutions and structures. Because these were established by the actors that are more powerful and active during transition and because these included those who successfully converted their old systemic capital, chance were that the new system is path dependent. Under these conditions, policies addressed to support productive outcome of systemic change had a fundamental role.

The question of policies and enforcement arose because actors had asymmetric position that were dependent from their old systemic capital, were ignorant of the attributes of the new system and because they had to devote costly resources to their measurement and monitoring in a situation characterised by great uncertainty. As a consequence, the social stability and symmetry required by an efficient market for institutions³⁶ and the success of a spontaneous co-operative game were lacking.

Failure to implement control and enforcement created great uncertainty over the distribution of property rights, contracts and the allocation of the costs and benefits of systemic change. As a consequence, distribution could become socially more relevant than production, thus leading to a socially inefficient outcome of systemic change. Therefore, the possibility of implementing effective and efficient monitoring and enforcement sets the upper limit on effectual systemic change.

During transition, the problems of missing, incomplete or wrong knowledge and of information asymmetry were particularly heavy. Consequently, the costs of measurement, enforcement and control were much higher than they are in normal conditions, and the implementation and outcome of these functions were consequently particularly weak. At the same time and because the costs of enforcement and control through policing are met by those who are controlled, their proper implementation could decrease the gains from transition for actors who had invested in general assets.

This happened when the decrease of uncertainty deriving from proper control and enforcement was not sufficient to compensate those losses. This raised the fundamental question of the effectiveness and efficiency of the state machinery and activity. Therefore, rational actors interested in transitional distribution should look for the demise of the state.

7. Path Dependency and the Costs of Systemic Change

When the Soviet-type economic system broke up, co-ordination between actors fell apart. This happened before formal systemic disruption took place and was followed soon by the disintegration of old (formal) institutions, even if old organisations could survive as an empty case. The result of these processes was uncertainty, because the minimum co-ordinates for probability distribution of outcomes of actors' activity were missing.

³⁶ For a proposal in this sense cf. S. Pejovich (1996).

This is not to say that actors could not take any decisions and pursue actions to their own advantage. In fact, under systemic uncertainty actors did not possess all the relevant information and all the computational ability required to take decisions, but they could adopt strategies to pursue their own interest. In fact, rational actors could adopt strategies of simplification, usually conservative ones.

They could choose the best option from among those they knew from their past experience and adjust their behaviour to the previous criteria. This they could do as long as the outcome was not a systematic worsening of their situation. In a situation of systemic uncertainty, many actors were likely to choose this strategy that was favoured by old systemic capital and this created path dependency of systemic change.

Indeed, there is much evidence that this was the strategy that many actors choose during transition in Central and Eastern European countries. Firms were caught amidst great uncertainty caused by transformation of the economic system, there comprising policies, privatisation, destruction of the previous administrative co-ordination system, disappearance of Comecon and its replacement with international competition, and possibly break-up of the country and the economy (such as in former Soviet Union). All this gave firms great impetus to rely extensively on traditional behaviour and networks, sometimes of illicit or illegal nature. In general, this attitude was less pronounced in countries that reformed earlier their economy (such as Hungary and Poland) and much more relevant in countries that arrived unreformed to transition and experienced various shocks (such as many post-Soviet countries).³⁷

However, there is another reason why path dependency could be a rational outcome of systemic change. In fact, systemic change was costly and produced losses because it modified the nature and value of system-specific assets and of systemic capital. Consequently, it altered the choices available to actors, and reallocated the costs and advantages deriving from economic activity. There are four types of costs connected to systemic change.

a) *Learning and measurement costs.* When the system changed, actors had to change their systemic knowledge, learn how the new system was working, collect information on the new situation and the new positions of other actors and measure the advantages and disadvantages of what was being produced and exchanged. This caused additional learning and measurement costs that constituted substantial part of the investment in new system-specific assets. These costs also included the failure of organisations and individuals to take advantage of opportunities.

b) These costs could be paid by individuals, such as workers, managers, or politicians who needed to gather new information on new jobs, learn new skills, set up new networks, learn the new features of industrial relations or how to manage a private enterprise. These costs were also paid by organisations, such as firms, that had to learn the new technology, how to afford and survive competition and set up a new information system, and trade-unions, that had to acquire a completely new role. Finally, these costs were also paid by the society at large and consisted, e.g., of the costs for setting up an entirely new statistical machine, or new legal and administrative offices (such as a new tax machine).

³⁷ Cf., for instance, W. Andreff (1996), I. Gurkov (1997).

b) *Enforcement costs*. These included actions to preclude investment in defence of the old system (e.g. by setting up police control or compensating specific social groups in order to get their support for the new system), to police and enforce agreements, control free riders and correct adverse selection, and avoid the creation of systemic monopolistic positions. All this was the cause of additional enforcement costs, that included the setting up of new legal and administrative structures for contract enforcement, anti-monopoly offices and policies and dismantling old monopolies. These usually required costly organisational restructuring of industry.

c) *Adaptation costs*. Any change implied the distribution of rights, costs and benefits from economic activity, which originated adaptation costs in order to protect rights, to take advantage of redistribution or try to resist disadvantageous redistribution, to specify contracts, to restructure and improve governance in line with the new system, and to develop new routines. Old routines (e.g. relative to queuing up, employment slack in plants, bargaining with central allocators) either disappeared or lost great part of their value. New ones (e.g. reacting to relative price changes or monetary policy signals) had to be developed. A good knowledge of privatisation principles and organisations had to be acquired in order to capture opportunities. Strategies had to be set up to protect the control over organisations and possibly transform it into ownership (e.g. through de-capitalisation strategies, bargaining with privatisation authorities, devising solutions for acquiring ownership before privatisation was implemented, exploiting asymmetric information, granting oneself bonuses to be used in privatisation). Once again, this concerned both individuals, organisations, and the society at large.

d) *Transition losses*. Because of transition, some actors incurred losses of old systemic capital, including losses resulting from weak monitoring and enforcement. This decreased the value of productive endowments of some actors (skills became valueless, valuable positions and the bargaining power deriving therefrom were lost, jobs were destroyed, etc.) and generated a flow of lower incomes for these same people or even nullified such incomes. In other cases, additional investment was required to avoid (partially) such losses. In transition economies, there were striking examples to support this point: the disappearance of the planning system and related structures, knowledge, and skills; the loss of value of old age and veteran status in the queue system; the loss of value of jobs connected to the allocation of goods in shortage; etc.

The larger was the difference between the old and the new system the more important are transition costs and losses. These costs were higher in the first stage of transition but their importance decreased progressively. However, their existence influenced decisions of actors who adopted strategies to avoid them or re-allocate them to other actors. These could not be the socially most efficient strategies of transition and could increase the importance of re-distributive processes over productive ones. Path dependency of systemic change was strengthened consequently.

Although these costs should be properly considered as a cost of investment in systemic change and should be financed *ex post* by greater efficiency and lower transaction costs of economic activity in the new system, there was no guarantee that this was so. The outcome depended on the features of the old system, the strategy and policies of transition, and the features of the new system.

Why did rational actors not oppose a strategy of systemic change that was likely to impose substantial transition costs to actor? There could be different reasons for this.

a) The level of transition costs could be underestimated. This was certainly an important factor of systemic change in Eastern Europe. No previous experience existed and relevant information and knowledge was missing, there was the successful example of developed capitalist economies, there was great hope in external support, most actors adopted wrong theories of systemic change.

b) Actors had long term strategies in which transition costs played the role of investments in a more productive system. This was certainly the case of reformers and planners of transition. This was apparently also the case of managers of the most efficient enterprises, in particular those enterprises that were trading with the West.

In general, one can suppose that these actors had previously invested in systemic change and were eager to obtain a return on that investment. Systemic change allowed them to avoid the actions and relative costs needed to defend their investment against enforcement in the old system. Also initial investment in systemic change made by systemic entrepreneurs created positive externalities for imitators. This could be particularly true when large-scale unproductive defensive investment was imposed on passive and dissatisfied population in order to defend the old system. This was the case of Poland in the Eighties.

c) Transition costs were deemed unique opportunities for rent-seeking and were considered lower than the short-term advantages that the new system promised. This was particularly relevant when uncertainty and short term perspective was dominant. Managers of firms that were the active party in spontaneous privatisation were a case in point. Others examples were citizens who supported politicians proposing privatisation via free vouchers or managers who used the newly obtained possibility to deal directly in foreign trade to export illegally financial resources.

d) Transition costs were unevenly allocated among actors. Those who were advantaged included many new politicians, those who were appointed managers of enterprises under privatisation, the managers of privatisation agencies or the newly settled financial institutions, bankers and various professionals. To this one should add the members of the booming organised criminality.

Given transition costs, systemic change was not as profitable as their promoters expected it to be. Actors realised this result slowly through time and adapted their behaviour and choices. This strengthened path dependency as a rational response which rendered some specific solution less difficult and less costly and therefore more likely to prevail than others. Network externalities, learning by actors, and the subjective modelling of the issue arising from previous investment in system-specific assets, reinforced path dependency.

Specific structures were set up to govern the allocation of costs and gains. This was the case of round tables between the old government and representatives of the opposition, such as in Poland. The management of such structures and the implementation of the agreements arrived at required intermediaries endowed with some enforcement authority. This role was played by such organisations as the Church, or the European Union. On other occasions, judiciary bodies played a similar role, as in Hungary.

The above mentioned problems highlight that spontaneous processes were insufficient to guide systemic change and stress the fundamental role of the state during transition. The state is a fundamental structure to reduce uncertainty, extend the actors' time horizon, and govern collective action during transition. It is only within this framework that spontaneous processes could reward productive actions. This was clear in transition countries only in exceptional cases since the beginning (in particular in Czechoslovakia). In other countries it was only in early Nineties (generally 1993-94) that became evident. Unfortunately, in other countries - e.g. many of post-Soviet republics - the near demise of the state enormously increased transition costs and depressed the opportunities for productive transition. The apparent reaction to these circumstances that is taking form is the establishment of a paternalistic or authoritarian state via path dependent adjustment.

8. Summary and Conclusions

In this paper I discussed some basic features of the Soviet-type economic system and I tried to show that the outcome of transition was neither unforeseeable nor irrational. I suggested an interpretation that was used to explain the economic logic of developments in Central and Eastern Europe.

The paper started by showing how important the economic system is in constraining and co-ordinating the activity of economic actors and stressed the complexity and the internal coherence of the classical Soviet type system. Then it introduced the basic concepts of systemic specificity of assets and investment in system specific assets as an investment in the opportunity set defined by the system.

Assets are system specific when they cannot be re-deployed to alternative uses when the system changes without full or partial loss of productive value. As a consequence, investment in those assets and the systemic capital they generate have the fundamental role of keeping the stability of the economic (and political and social) system. Those assets and related investment and capital that do not share these features are defined as general.

The paper showed that the Soviet type system included a great deal of system specific assets, that actors invested intensively in those assets and accumulated a great amount of systemic capital. This was the basic set of factors that explain why the system was stable for such a long time even if it was not effectual, and why its efficacy was decreasing through time. From this analysis I concluded that the higher and individually more concentrated was the investment in (old) pure system-specific assets relative to the overall investment and consequently the higher was pure systemic capital relative to overall capital, the higher was the cost needed to run and defend the old system. Consequently, the lower was the captured value of general investment and the return on general capital, the higher were asymmetries among actors.

The long period of systemic stability was depicted as a stasis, because the system was incapable of endogenous evolution following the accumulation of internal economic and environmental changes. However, stasis was also the result of a set of powerful obstacles to systemic change that had a conservative role because of the in-built features of systemic capital. These were the satisfactory outcome of the system in certain fields, the external threat, and the existence of different inter-temporal and inter-personal discrepancies that prevented the successful reform action.

However, a set of factors accumulated in Soviet type economies that required systemic change. Because the old system was resilient to evolutionary change due to the pervasive and conservative role of systemic capital, change was punctuated in character. Among the factors that prompted systemic change, the decreasing growth rate of the economy stood out as the most prominent one. In fact, it demonstrated that the old system was incapable to pursue what used to be its most important factor of legitimacy in the past.

Systemic change was a set of complex processes that was set in motion by systemic entrepreneurs who invested in systemic change. This effort was successful when imitators led such investment to reach a critical mass and diffused and adapted it to changing conditions. This suggests that important costs and gains from systemic change existed. It was concluded that the higher and individually more concentrated was the investment in (old) pure system-specific assets relative to the overall investment and system-specific capital to overall capital, the higher were needed investment in systemic change, transition costs, and the possibilities that system change was punctuated.

Investment in systemic change created uncertainty because it destroyed the basic formal institutions and co-ordination among actors. It was concluded that externalities produced by investment in systemic change and the ensuing alteration of the property right structure determined the distribution of transition costs and gains and, via the destructuring of the old formal institutions and monitoring and enforcement system reinforced by the activity of actors who could influence the variability of particular attributes, created a great amount of contestable value of and income stream from most assets. This produced opportunities for investing valuable resources to capture gains and avoid costs via transitional distribution, that further increased asymmetries.

Therefore, there was a need to reduce uncertainty and govern the allocation of costs and gains in order to stimulate investment in general assets and decrease the cost of control and enforcement. This stressed the importance of effective and efficient control and enforcement also by the state. When this was missing, as was the case of Central and Eastern European economies quite often in the first years of transition, costs were higher than necessary, and their allocation did not favour a productive outcome of transition. This was the fundamental reason of path dependent transition in many countries.

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Economic Growth in Transition CEECs: Implications for and of Modern Growth Theory

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Introduction

Transition to a market economy in the Central and Eastern European countries (CEECs) has led to a U-shape response of output, that is, a sharp decline in output followed by recovery. At the present stage the main object of these countries' policy is to recover the economic growth under the new market conditions and promote further sustainable economic development.

The paper is aimed at analyzing basic developments in the CEECs during the last 8-9 years, concerning the efforts to stabilize the economies and return to steady economic growth in perspective of the new endogenous growth theory¹. Six countries are considered: the Czech Republic, Hungary, Poland, Slovakia, or the so-called Vishegrad group, as well as the Balkan countries Bulgaria and Romania. The Vishegrad countries were traditionally more developed than the other former socialist countries.

Bulgaria and Romania had higher economic growth in comparison with the Vishegrad countries in the 1980s. The Vishegrad countries are relatively advanced in the transition. Unlike them Bulgaria and Romania have still problems of stabilizing inflation and providing the macroeconomics foundations for steady growth, and have just been undertaking adequate structural reforms to establish the microeconomics foundations of growth. The study is organized as follows.

The first section presents an overview of the basic macroeconomic indicators by country: GDP, inflation, unemployment, investment, trade balance, external debt, etc. The economic performance of these countries for the period 1990-1997 is analyzed in view of outlining the main determinants of their economic growth in terms of the modern growth theory. The last about nine years have brought radical changes in the CEECs, such as the growing share of the private sector in GDP, the redirection of trade from East to West, the positive alterations in the size structure of the manufacturing and service sectors, the

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resumption of foreign direct investment (FDI) in the region for the first time since the Second World War. In general, the CEECs succeeded in establishing the ownership, trading, structural, organizational, institutional, and parliamentary political conditions for a market economy. The results vary from country to country.

The second section presents the basic ideas of the new modern (endogenous) growth theory, as they are developed by its founders and their followers. The endogenous theory is discussed as a new approach to measuring and analyzing economic growth, giving rise to a variety of new issues, in particular these, concerning the transition CEECs' economic growth.

The third section discusses implications of the modern growth theory in the case of the economic performance of the transition CEECs. For the time being it is impossible or of no practical value to carry out direct measurement with the help of already existing models or new ones: firstly, because of the comparatively short period has passed since the beginning of the 1990s, and secondly, because of the mixed and not typical nature of the economic situation, that means transition from centrally planning to a market economy under the condition of a severe crisis. The economic performance of the CEECs, however, shows in a specific way the importance of the new modern growth theory for explaining and promoting economic growth. Finally, concluding comments are given, concerning the two main subjects: the nature and prospects for the future of the new endogenous growth theory and the efforts of the transition CEECs to turn the corner towards economic growth.

Economic Growth and Performance of the CEECs, 1990-1997: An Overview

The declines in output during the initial phase of transition in CEECs were considerably larger than most observers had expected. Although the process has begun, the recovery in all countries is slow and still precarious. Economic growth began in these countries, but up to 1995 most of them did not recover their level in 1989 (or in Poland's case 1979)². It can be noted that Poland is relatively the best placed in terms of the relevant macroeconomics indicators, followed by Hungary, the Czech Republic, Slovakia (Table 1)³.

The basic macroeconomics indicators (annual changes of output, unemployment, inflation, labour productivity, trade balance, external debt etc.) of the countries under review for the first eight years of transition to market type economy are presented in Table 2 and Table 3. General developments could be summarised as follows. The first four years, approximately, were dominated by a severe crisis. In the case of Bulgaria, for example, the crisis was expressed by slowdown of GDP by one third and of industrial production by half. After that some signs of these countries' recovery appeared: GDP began to grow, inflation to decline, fixed capital formation to increase, unemployment rate to decrease.

Generally, the immediate consequence of the transformation on rural performance was the drastic falls in agricultural production, in particular in 1992 and 1993. The Bulgaria's agriculture, for example, had the lowest production in 1993. For the period 1990-1994, the real output in agriculture decreased by 55%.

³ It should be noted, for example, that after the Great Depression the USA GDP level of 1929 has been recovered in 1937.

Total consumption significantly decreased in the 1990s in every country considered except Poland, where consumption has been declining since the crisis of the late 1970s and early 1980s.

Investment in every country under review decreased faster than GDP. The most dramatic year was 1991, when the fixed capital formation rates were twice lower than those of output in the Czech Republic and Slovakia, much lower than that of the output in Poland, Bulgaria and Romania. For Hungary are typical the same rates of decline (over 11%) for GDP and fixed capital formation in 1991. Since 1994 the fixed capital formation rate notably increased in the Czech Republic, Romania, Poland, etc. In general, however, in the mid-1990s investment rates and the ratio of investment to GDP have been still low. This indicator is predetermined to a great extent by two others: indebtedness and foreign direct investment (FDI).

Except the former Czechoslovakia and Romania, the emerging market economies inherited considerable external debt burdens from the old regimes. In 1989 Poland was with the largest debt in absolute term (about \$ 43 billion, as the country is inhabited by over 36 million population), followed by Hungary (over \$ 20 billion, and 10 million population), Bulgaria (\$ 9 billion, and 9 million population), the former Czechoslovakia (\$ 6.5 billion, and about 17 million population) and Romania (\$ 1 billion, and 23 million population).

Bulgaria's external debt was negligible in the early 1980s, and it was accumulated during the following years, while the old regime in Romania gave a priority at that time to reducing the state external debt. The Czechoslovak government had not built up foreign debt. In mid-1990s the gross external debt in these countries is still very high amounting in 1996 to 1.9 years' exports in Hungary, 1.7 years' exports in Poland and 1.6 years' exports in Bulgaria. Relating to GDP, the external debt in Bulgaria is bigger than the annual mid-1990s GDP, in Hungary it is about three-quarters of the GDP, in Poland is about half of it. Hungary is typical of punctual repayment, since in 1985 and 1994 the ratios of debt servicing to exports were about 36 - 37% (Table 6).

The importance of foreign direct investment (FDI) to the transformation of the CEECs should be stressed. It is known that Hungary has dominated in the region as a destination and imported more capital than any other CEEC. Having a declining trend of the public and external debt ratios, Hungary has regained the confidence of international investors. FDI inflows were strong and this country could borrow on the international capital market at continuously improving rates (European Economy, 1997, p. 8).

Discussing the phenomenon of FDI in Hungary, other favorable factors should be mentioned: the better geographical location of the country in comparison with the other CEECs, the good country's image, the relatively higher level of industrial development, the highest share of foreign trade with developed market economies in the past decades compared with the other countries under review which indicates deeper economic relations with the Western countries. Nevertheless, without a large inward flow of FDI the Hungarian debt crisis would have become inescapable as early as 1993. In any case, with a fall in GDP of over 20% between 1989 and 1995 and a huge burden of debt servicing, there was no way of generating at home the capital needed to modernize the economy. So a large inward flow of FDI remains the only possible way of financing the structural and technological renewal of the economy, introducing new management methods, and attaining new levels of organization and discipline.

World practice shows that the preferences to locate productive capacity in one country rather than another are based mainly on economic factors such as labour costs, profitability, tax regimes, transport costs, but also geographical proximity, political stability and economic prospects. In this aspect, the CEECs advantages so far are their relatively very low labour costs, skilled labour force and the potential for market expansion.

The most often discussed factor with foreign investors until now is the availability of highly trained and cheap labour force in the CEECs which could give such projects a high return on capital. There are available data only for Hungary, where it is estimated that only 40% of foreign capital was spent on purchasing, restructuring and modernising formerly state-owned firms (Ehrlich, 1996, p.10).

Theoretically FDI is always regarded as favoring local growth because it is likely to bring advanced technologies, techniques and business methods. Thus FDI facilitates the capital formation that could boost exports and industry as a whole. The local impact of FDI, however, is more complex and less unambiguously beneficial than it is regarded. Generally, foreign companies are in fast-growth, high-productivity sector but tend to bring with them a restricted range of functions and could not be integrated well into the local economies (Bradley, J. (ed.), 1995, p. 46). In many cases the initial motive for FDI in the CEECs is to gain market share or eliminate a potential competitor. The take-overs are not always designed to improve or modernize the activity. In addition, since all the countries considered have not yet developed long-term industrial strategies, FDI could impact on or change their industrial structure development in a different way (Elteto, et al, 1995).

The data for labor productivity show that its decline also follows the U-shape response of output, but the recovery is faster (Table 7). This phenomenon should be explained except by other processes going on, by the process of overcoming of the overemployment (or the substantial labor hoarding) during the pre-transition period. For example, the number of employed in the Czech Republic decreased by 10% in 1985-1995, in Bulgaria by over 27% in 1990-1997. Taking into account the size of the output decline, the worst positions of Romania and Bulgaria could be understood.

The two digit levels of unemployment rates are typical of all the countries under review in the 1990s except the Czech Republic and Romania (Table 2). The low unemployment rate in the Czech Republic (only 3%) is a good indicator in itself, but it could be considered also as evidence that restructuring processes are only just in the beginning on the micro level.

The unemployment rates are different by economic sector and they influence directly on the employment distribution. In all the countries under review the proportion of the employed in service sector increased at the expense mainly of industry. The following picture is typical for Bulgaria. The level of agricultural employment is about the same it was in 1989 (780 thousand), but due to the faster decrease in the industry employment, its proportion in total employment increased from 18% in 1989 to over 24% in 1996 and 1997. At present, one in every four employed in Bulgaria is engaged in agriculture, which is a rather high rate for agricultural employment both by international standards and for an industrial developed country at Bulgaria's level.

The transition CEECs could regard as an achievement the redirection of their trade from East to West. This means that the region is steadily returning to its position as an integral part of Europe and world economy. This situation is evident even in the case of Bulgaria

being in the past one of the most economically connected with the former centrally planned economies, in particular the former Soviet Union, i.e. its main trading partner and main supplier of energy and raw materials. It should be noted, however, that the collapse of CMEA trade, in particular both former Soviet markets and Soviet suppliers, has been earlier and deeper than expected. Every country paid a very high cost for the redirection in recent years, and will continue to do so.

It is argued that at present the CEECs economic growth is driven mainly by domestic demand which entails imports rising very fast there. The slower exports growth, however, resulted in a substantial widening of external imbalances in the second half of the 1990s (Table 4). The decline of the growth rate of EU imports from 7% in 1995 to only 3.75% in 1996, obviously has negatively affected economic developments in the CEECs. According to the EC forecasts, "the trade balances of the CEECs will further deteriorate, although at a slower pace" (European Economy, June 1997, p. 2).

The arguments of this institution are that external imbalances can be treated as a normal phenomenon for transition countries, because of their high need for mainly imported investment goods. However, the dynamics of the fixed capital formation in these countries until now does not support much similar views. Studies on small firms developments in transition countries showed that among the biggest problems preventing small firms from increasing sales on the domestic market was the low level of demand (Bartlett and Rangelova, 1997a). The decreased purchasing ability of population should also be taken into account. On the other hand, theoretically the persisting trade balance deficits could be regarded as a sign of an eventually overheating of the economy.

Western countries could make, and have made, important contributions to the process of reform. Access to the markets of industrial countries is vital for a rapid return to growth. This interpretation is consistent with the view that most East Asian countries, for example, have achieved rapid economic growth and development by export promotion policies rather than import substitution policies (see Ito and Kruger (Eds.), 1995, p. 263).

In fact, however, the Western countries maintain import restrictions on many potential Eastern European exports like food, textile, steel, etc. This problem is very complicated, but in general, we can say that providing the CEECs countries with access to western markets is the direct and best way to strengthen their market economies.

Most uncertainties on this subject concern agricultural relations. While the six CEECs considered as a whole realized ECU 960 million a positive trade balance of agricultural products with the EU in 1990, the deficit was over ECU 435 million in 1993, i.e. in the initial period under the concluded bilateral Association Agreements among the CEECs and the EU. It turned out that the method implemented for trade negotiations favored the EU, but not at all the CEECs. Thus, concerning the growing EU surpluses, Western Europe has gained until now more from the opening up of the CEECs economies than vice versa. The only country, achieved a favorable balance was Hungary, although it was reduced by half in comparison with those of the previous years (Rangelova, 1997a).

The inflation rate in all countries regarded continues its gradual downward trend with the exception of Bulgaria and to a lesser extent Romania. According to forecasts of the European Commission, it is expected to get close to or reach single digit levels in 1998 (European Economy, June 1997).

In general, all of the transition CEECs have suffered, to one degree or another, from inherited conditions connected with low competitiveness, the lack of developed financial and fiscal institutions, low confidence in economic policy, and the accumulation of bad loans. The initial conditions in *Bulgaria*, however, were more unfavorable than average in this entire region. The fact that Bulgaria has lagged behind the other CEECs in stabilization and structural reform reflects, to some extent, these relatively adverse initial conditions. In addition, we observed inconsistent implementation of the reform and economic mismanagement. The lack of structural reforms began to have harmful repercussions on the monetary reform and economic stabilization as a whole. After two years of moderately improving macroeconomics stability and growth (1994 and 1995), Bulgaria fell into a new economic decline in 1996, when GDP dropped by 10.9%. The lack of structural reform, combined with a real appreciation of the currency, led to a weakening of the balance of payments and decline in foreign reserves. Impending external debt service obligation, in addition, helped to create an exchange rate crisis. The Bulgarian currency fell from 70 per 1 USD at the beginning of 1996 to 500 per 1 USD by late December. At the beginning of 1997, the currency collapsed. In February the exchange rate approached 3000 BGL per 1 USD. Retail sales in the first two months of the year slow down by 70% in comparison with the same period in 1996, the average public sector wage fell to about USD 10 per month. The monthly inflation for January was 43.8%, for February was 242.7%, in March it was only 12.3%, but in April it was -0.7%, i.e. deflation, in May there was again inflation in size of 5.6% .

In April 1997 new parliamentary elections have been held in Bulgaria aimed to stabilize the economy and to restore confidence. The programme agreed with the IMF entails the introduction of a currency board arrangements (from 1 July 1997), price liberalization, and a major acceleration of privatization. In general, the programme is with a strong emphasis on structural reform. In the end of 1997 there were indications that Bulgaria has been starting to emerge from its deep economic crisis.

Money has begun returning to the banking system The most expressive change was the fact that the central bank was able to increase its foreign exchange reserves to a highest level since 1990. Only in a few months later a remarkable success was achieved in terms of the financial stabilization in the country. One year after the introduction of the currency board arrangements the progress in the implementation of the reform is evident, although since the mid-1998 we have again observed an outflow of money from the banks as well as delaying privatization and structural reform. The main priority is however, to make up lost time and revive the economy. According to the OECD opinion (OECD Economic Surveys, Bulgaria, 1997, p. 2):

“The hope is that the crisis may at last provide a context to realize painful but necessary decisive measures to deal with loss-making banks and enterprises, accelerate privatization, and improve the overall environment for domestic and foreign businesses.”

The economic growth in *the Czech Republic* is stable, but some problems have begun to emerge. This country is characterized by the strength of domestic demand (at present fuelled by rapid wage inflation, see Table 3), resulting in strong growth in imports. The economy therefore faces a large trade deficit, accompanied with other monetary and fiscal problems (Table 4). Analysts show that enterprise restructuring is getting more urgent.

Although significant progress has been made with the privatization programme since the beginning of transition, the process has now slowed (European Economy, June 1997, p.5).

The economy of *Slovakia* continues to grow rapidly. However, there are indications of overheating. Firstly, while in 1995 industrial production was still growing rapidly (8.3% in 1995), it began slowing down and it was only 2.5% in 1996, and 2.2% in 1997 (Table 2). Secondly, due to the strong increase in imports, the trade balance deteriorated from a deficit from 1.1% in 1995 to a ten times higher deficit in 1996 (-11.1%). There are indications for further deterioration (Table 4).

Hungary keeps to its moderate economic recovery. The country enjoys the confidence of international investors, and has attracted relatively large amount of FDI in the region. In the same time the growing gap has been widened between exports and imports. The Hungarian banking sector is relatively healthy, the structural reforms and privatization are going ahead.

The main source of growth in *Poland* is the private sector where nearly 80% of GDP is producing and about 60% of the labor force are employed (see Table 5). Poland managed to halve the debts it has accumulated since the early 1970s by repeated rescheduling. At present, the country meets a huge influx of FDI, which ranked Poland among the major recipients in per capita terms. Unemployment continues to decline.

Romania showed marked growth decline since 1996. A comprehensive programme of macroeconomic stabilization and structural reforms was announced in the beginning of 1997. However, the GDP dropped by 6.6% in 1997.

The debate about the EU's eastward enlargement has so far been marked by a prejudiced view that the countries joining would be the potential winners of accession, while the current members would be the losers (Gabrisch, H., 1996). This impression is probably reinforced by the pressure for early accession exerted by the CEECs, on the one hand, and the EU's delay, on the other hand. The EU interest to help these countries to overcome present economic crisis without expanding destabilisation effects in Europe coincides with its fear of the effects a very fast accession procedure that might have on both sides.

In 1998 preliminary talks with three from the countries under review (the Czech Republic, Hungary and Poland) on their full membership in the EU began. As the overview presented shows these countries are closer to the economic criteria demanded for membership in the EU than the rest ones. Giving priority of the three countries, however, will create conditions for widening the gap between them and the rest Central and Eastern European countries. Bulgaria and Romania still have to do much more efforts to achieve economic progress. On the other hand, these countries will be discouraged because the long-time prolongation definitely will not contribute to settle the problems existing, and even could have the opposite effect. For all CEECs the shorter is the horizon time for entry, the more effective will be they in improving their economies.

Basic Features of the Modern Growth Theory

In the last over ten years economic growth theory has been characterized by numerous developments (Romer, 1986; Lucas, 1988; Rebelo, 1991). The common feature of these

models is that, in contrast with the classical and neo-classical growth theory, they assume that there is no diminishing return to capital. Investment, whether in physical or human capital, leads to an increase in productivity that exceeds the private gain. According to a Romer definition:

“Exogenous growth models fill in the blank with a constant that is a fundamental parameter of the economy. Endogenous growth models fill it in with an expression that is a function of other basic parameters of the model, including parameters that can be changed by policy-makers” (Ito and Krueger (eds.), 1995, p. 67).

In other words, while long-term growth was driven by some unexplained trend of technical progress called total factor productivity (TFP), which became known as the Solow residual or in the terminology of Gomulka (1986, p.21) “the measure of our ignorance”, endogenous theory explicitly takes into account the fact that technical progress has its own economic determinants, and depends on the incentives to innovate, to acquire education, and on the acquisition of knowledge as a by-product of economic activity (learning-by-doing), all channels being dependent on many aspects of the economy. Recent empirical studies indicate that additional sources of cross-country variation should be included, especially differences in government policies and in initial stocks of human capital (Barro and Sala-I-Martin, 1995, p.10). Other endogenous growth models emphasize on the role of international trade (Barry, 1996).

There are studies identifying a variety of endogenous growth patterns. Bradley reviews these developments, focusing on the set of four mechanisms which these theories have postulated may be responsible for generating faster economic growth. Taken in turn, these are: human capital; public capital or infrastructure; industrial policy; and technology and trade (Bradley (ed.), 1995, p.27).

The origin of the endogenous growth theory could be connected with the research interest in growth based on catch-up theory. In general, catch-up depends on what Abramovitz (1986) called “social capability”. This means “the ability effectively to assimilate the required technical and organizational changes which in turn depends on institutional arrangements and the incentives facing political decision-makers as well as investments in intangible capital” (Crafts, 1996, p. 31).

The new modern (or endogenous) growth theory is based on the neo-classical methodology and relies on the same concept such as aggregate capital stocks, aggregate production function, etc. It uses modern mathematical methods of dynamic optimization and differential equations. A clear distinction between the growth theory of the 1960s and that of the 1980s and 1990s is that the recent research pays much more attention to empirical studies. Many empirical studies pioneered by Barro (1990, 1991), followed by De Gregorio (1992) among others, has investigated the empirical link between long run growth and a variety of economic and social, political and institutional indicators in a cross section of countries, with the average growth rate of different countries as the dependent variable and various economic, social and political factors that might affect the growth rate.

It is well demonstrated in the literature, however, that until now there have been very few systematic tests of the new growth theory and most of the empirical work motivated by

this theory has actually tested implications of the neo-classical growth models than testing endogenous theory itself (Pack, 1994). The practice to include a wide range of explanatory variables has the advantage of trying to define omitted variables, but at the same time entails disadvantages. Scientists, however, make a serious effort toward reaching this goal, or in the terminology of Romer (1989, p. 51), growth theory once again entered “a period of ferment”.

Macroeconomists have known for some time that the economics of ideas and knowledge differs in important ways from the familiar economics of objects. They change their thinking about fundamental policy issues in growth and development. For instance, in the case of East Asian countries, microeconomic flexibility and good macroeconomics policy has been an essential feature of successful economies. It could be generalized that “whether there is endogenous growth or not, any understanding of the East Asian experience, and especially of the rapid acceleration of economic growth after policies were changed, must take into account the role of economic policy in affecting growth rates.... those policies which immediately preceded the transition to rapid growth” (Ito and Krueger (eds.), 1995, p.3).

It could be argued whether the present time is relevant to apply the economic growth theories to the experience of transition countries, mainly because of the mixed and untypical nature of the economic situation there in the last years, i.e. neither plan nor market under the condition of a severe crisis, which in addition is a period not long enough in itself for studying economic growth. But there are at least three arguments supporting the idea.

- (a) Firstly, when a topic like studying economic growth goes out of fashion or practice (as it has been more or less the situation in the CEECs since 1990), much of what is known in the area goes out of research work and even is not transmitted to students. Then when activity picks up, a new generation of researchers has to spend time rediscovering results that have previously been established.
- (b) Secondly, short-run fluctuations more often than not have long-run effects. Because “long-term growth presumably constitutes a process of commutative rather than repetitive change to a greater degree than other economic phenomena” (Abramovitz, 1989, pp. 116-117). From this follows that we need to understand better the relationship between the short-run behavior of the economy and its long-run dynamics.
- (c) Thirdly, if we are able to make better analyses using the modern growth theory, we could apply it for improving the short-term economic policy in the CEECs.

The CEECs Experience and the Modern Growth Theory

The increasing interest in the new endogenous theory has resulted in explosion of empirical applications, reflecting in different way the economic relations in both market economies and the transition CEECs, namely: investment and growth; innovation and growth; growth and welfare; trade policy and growth; economic integration and growth; international debt and growth; fiscal policy and monetary policy and growth (Barro, 1990;

De Gregorio, 1992); human capital and growth, in particular labor force structure and educational levels, economic implications of the aging population; peripherality in economic geography and modern growth theory (see Barry, 1996), etc. Until recently, the effect of nation's institutions in stimulating or retarding economic growth was a completely ignored issue but nowadays is regarded as one of the important growth factors.

In open economies like the CEECs trade policies could affect very strongly innovation and growth. The integration of these countries into the world trade could create powerful forces that speed up growth. At the same time trade policy is quite heavily constrained by international agreements, and may have very negative impact in a recently liberalized economies. Further on we discuss some implications how the underlying forces of growth have changed in the transition from centrally planning to market type economies (Table 8). There are concerned three main groups of growth determinants: *first*, monetary and financial policy, in particular managing exchange rates (ER) and the role of inflation for promoting growth in their capacity of factors for stabilization of the transition countries' economies; *second*, the role of the macroeconomics policy, in particular of the government for restructuring of these economies and *third*, the role of hidden economy, in particular tax evasion (TE).

1. Monetary and Financial Policy: Implications for Growth Policy

One of the implications in the endogenous theory is that two otherwise identical economies except for economic policies, could have as a result of their economic performance in long-term not only different levels of income but also different rates of economic growth.

Managing Exchange Rates

The ER became one of the most important policy indicators in the CEECs. The choice of ER regime has implications for economic growth. The ER regime can influence economic growth mainly through investment and productivity. There are a variety of ER regimes within the two polar regimes: fixed and floating, for example, pegged to a single currency, pegged to a basket of currencies, limited flexible, managed floating, independently floating, etc. Theoretically, adopting a pegged ER in the beginning of the 1990s (as it was the practice of the countries under consideration except Bulgaria) can lower inflation by inducing greater policy discipline and greater confidence in a given currency. Thus pegged rates are associated with higher investment, but also with slower productivity growth which is regarded as an advantage of the floating regimes. The theory also indicates that small open economies are better served by a fixed ER, and that the less diversified is country's production and export structure and the more geographically concentrated is its trade, the stronger is the case for a fixed ER. Also the lower is the level of economic and financial development, the greater is the relevance of a fixed ER regime (World Economic Outlook, October 1997, p. 82-83). This means that the capability to use the nominal ER as an adjustment mechanism could result in better stability of growth.

What is the situation in the CEECs under review? In 1991 Bulgaria adopted the so-called dirty (or managed) floating regimes (until 1 July 1997, when a currency board regime was introduced on the basis of Deutsche Mark). In theory the floating ER is strongly related to the rates of inflation. Judging by the elasticity coefficients, calculated on the basis of

monthly data available for the period 1991-1997, in practice such a relation was not observed, or when it was observed, it was weak. This means that the ER did not follow inflation. The impact of other factors influencing the ER should be remembered, primarily the intervention of the Central Bank.

Romania adopted two ERs: the official and the so-called market ER, as there are constraints that the latter could not fluctuate more than 10% around the official one. As a result until now the real ER in this country is relatively stable. It could be speculated that the system of constrained market ER did not allow in Romania the same developments of the ER which were observed in Bulgaria as well as in most CEECs, namely a gradual appreciation of the real ERs.

In the mid-1990s sustained economic growth in the Vishegrad countries was accompanied by rising external imbalances. In response of concerns about the worsening trade balances these countries turned a special look at the relation between this imbalance and the ER policy.

It was noted that Hungary attracted relatively large amounts of FDI, but at the same time a growing gap has been observed between exports and imports. In this connection it should be added that a high level of international reserves is generally regarded as positive phenomenon, but the other side of the story is that accumulating international reserves there are indirect costs in form of upward pressure on ER in a debtor country. In order to improve the trade balance a stabilization package of March 1995 was introduced in Hungary, including a pre-announced crawling peg regime with monthly 1.9% in the first, and 1.3% devaluation in the second half of 1995. The package brought about 9% devaluation and 8% import surcharge on consumer and intermediate goods for domestic sale. Halpern (1996) analyses five real ER indicators for Hungary, as they are explained in econometric equations by employment, unemployment, productivity, interest spread and real producer wage. The conclusion is that for Hungary is important to increase flexibility of ER to avoid large fluctuations in differences in yields on foreign and domestic assets, or more generally, to react to ever changing external and internal position.

Inflation and Growth

It is known that there are many channels through which inflation affects economic growth: allocation of resources, in particular the role of money and its effect on the productivity of capital and the rate of capital accumulation. Because of high rate of inflation households and firms tend to divert resources from productive activities to other activities allowing them to reduce the burden of the inflation tax. High inflation rates change the consumer behavior. In the case of transition countries high rates of inflation force people to exchange their money deposit into hard (convertible) currency which change the patterns of money turnover entailing further consequences. It has to be stressed that removing inflation is necessary but not a sufficient condition to foster growth.

In practice, there are different combinations between the degree of inflation and growth, e.g. inflation without growth, low inflation and slow growth, rapid growth and inflation, growth without inflation, etc. The studies on interaction of inflation and growth are among the most numerous in the field of economic growth research. However, economists cannot until now unambiguously identify the relationships between inflation and growth both in short-term and long-term. The experience in the CEECs is one challenge more in this sphere. At the

same time, using the endogenous growth theory, some scholars began to specify empirical growth models in a way, which made it possible to isolate the analytical and empirical links between inflation and growth.

Gylfason and Herbertsson (1996) use a simple model of the simultaneous determination and interaction of inflation and growth to estimate the growth part of the model. The model is constructed by incorporating money into an optimal growth framework with increasing returns to scale. Several channels through which high inflation tends to reduce growth and declining growth tends to amplify inflation are discussed. The effect of inflation on growth is estimated using data for 170 countries for the period 1960-1993.

The result shows that during this period increased inflation tended to retard growth in a large group of countries at all income levels, both across countries and over time. The link between inflation and growth is fairly strong: an increase in inflation from 5% to 50% a year from one country or time to another reduces the rate of growth of GDP per capita by 0.6% to 1.3% a year depending on the benchmark regression, other things being equal. The link is not linear. As the authors claim, their model constitutes an attempt to introduce money and inflation into the effects of monetary and fiscal policy, private saving, and portfolio choice on both inflation and growth in long-term.

The link between inflation and growth is established here by combining the quantity theory of money and portfolio choice with an optimal growth model that includes money. This approach is different with this of De Gregorio (1992), where inflation growth through investment and its productivity provides this link or with the approach of Roubini and Sala-i-Martin (1995), where financial repression provides the link between inflation and growth (this model is taken up later).

For self-evident reasons studying the interaction between inflation and growth in the CEECs is still at a tentative phase. Using econometric tests it is found that the CPI in Bulgaria can be explained by government borrowing, adaptive expectations of inflation, exchange rate movements and interest rates. In a less satisfactory equation describing the PPI, the most important variables are the exchange rate, interest rates, domestic credit and wages.

Miller (1997) studies an interesting aspect of the interaction between high inflation and declining industrial output typical of many CEECs in the early years of transition. In most countries the PPI is rising much more slowly than CPI. Miller explores the implications of this increasing divergence. The gap between the growth rate in producer prices and retail/consumer prices (calculated on the basis of the movement in the index over the previous 12 months) has been particularly sharp in Bulgaria (1.36), followed by Hungary (1.14), the Czech Republic (1.1), Poland (1.07).

In Romania (and Russia) the reverse has occurred: the PPI has moved up more rapidly than the CPI. It turns out that some economic indicators like real exchange rate movements; real interest rates and real wage changes are very different when are viewed from the perspective of the PPI. Considering the price changes in this light, it is clear how state enterprises are experiencing a profit squeeze caused by high real interest rates and rapidly increasing real wages. Concerning the economic growth, this means that significant income in Bulgaria has been generated in the retail sector, including the new private sector.

2. Growth and the Role of Government

According to the endogenous innovation approach, the growth rate could increase by appropriate government intervention. When the government has not managed to reduce public expenditure as planned, it has nevertheless hampered the growth rate. Private and still more public consumption develops as a function of the government decisions. In recent studies the effects of government consumption on the rate of economic growth have been examined, where it is shown that an increase in the share of government consumption in GDP has a negative effect on the rate of economic growth. The argument is that government consumption has no direct effect on private productivity, but lower saving and growth through distortionary effects from taxation (see Barro, 1990).

During the transition from centrally planned to a market economy, where the private productivity is not yet an important growth factor, total consumption, in particular public consumption tends to move in parallel with investment, as a result of monetary and fiscal policy. Formulating the monetary and fiscal policy at this stage of shrinking GDP, governments take into consideration the public mood in view of maintaining political stability. In Hungary, for example, social spending on unemployment, health education and pensions accounted for almost three-quarters of public spending. On the other hand, the people in these countries enjoyed generous social welfare benefits systems under the condition of centrally planning, such as transport and housing subsidies and extensive food price support measures. Since real wages in the period under review have been diminishing for self-evident reasons, curbs on public consumption could be politically dangerous. In this respect government policy varies from country to country.

The CEECs experience in the last eight years showed, that supply-side policy could be regarded in general successful, but in many cases ineffective and even sometimes harmful. As main reasons for this phenomenon could be pointed at least the following:

- (a) The very hard initial conditions, and the severe crisis have caused a unique and difficult process of transition to a new type of economic relations. Under these circumstances there is constant need to improvise and the challenge is to do so while at the same time not giving up systematic rational thinking;
- (b) In the capacity of an executive body the governments prefer to concentrate on subsidizing physical investment looking for a short-term effect than to consider the endogenous factors, links, consequences for the economic growth (Crafts, 1996, p. 35). Taking into account the severe economic crisis of the CEECs in the early 1990s, the governments' first priority in many cases was merely one of conducting "first aid" as they attempted to "save the state";
- (c) During transition period political decision makers, more than usual, see votes to be lost rather than won by undertaking short-term pain from supply-side reform even when the long-term rewards could compensate or even benefit the possible losers. Moreover, it is known, that short-term macroeconomics performance has powerful effects on government popularity;
- (d) There were (are) inevitably mistakes due to inexperience or policies which had (have) unintended consequences;

- (e) The phenomenon corruption. The willingness to engage in corruption, in particular at the lower levels of officials' bureaucracy frequently receives an impetus from low and often declining real value of public salaries. Officials in the transition countries could have a weaker aversion to corruption also because in many cases they have been catapulted (mainly for reasons of an ad hoc or short term policy) from the lower ranks into position of power and, therefore lack of sense of mission and social distance from those they deal with;
- (f) The fact that the role of the government in the former centrally planned economy had overwhelming provided a fertile ground for the spread of corruption. By the time these regimes collapsed, the effect of corruption was felt through most economic activities. The process of reducing the role of the state in the economy (by price liberalization, privatization of state enterprises, etc.) itself produces enormous opportunities for bureaucratic corruption during the transition when the institutions necessary to limit it have not yet been developed while the habits developed in the previous period may not have changed. As a result the scale of "the trade within the state" was significantly extended.

The sources of corruption related to the extent of government intervention in the economy are, as follows: trade restrictions as the prime example of government-induced sources of rents; government subsidies (including tax expenditures) explain corruption as a function of industrial policy; low wages in the civil service relative to private sector wages or per capita GDP are also a potential source of (low-level) corruption, etc.

In fact, the former co-ordination mechanism in the CEECs was abolished, but a new market-type mechanism has been just emerging. As a result, in many aspects companies have no orientation. In particular, this caused discrepancies between the macro and micro economy, or rather the macro and micro levels of the economy which influences badly on the whole economic performance (Bartlett and Rangelova, 1997a, 1997b).

To develop the economy, an active role of the government is still needed; it should be the state together with the Parliament and the courts beyond government. As the Hungarian economist J. Kornai (1993) emphasizes:

“A growth-oriented government programme is necessary to encourage investors and intervene in manufacturing parts of the market mechanism. The new role of the state should include making laws and sanctioning them, pursuing a fiscal and monetary policy and to create new institutions of the market.”

3. Informal Economy and Economic Growth

The discussion of the impact of the informal economy (hidden, grey, second, underground, shadow, etc., the shades of these terms' meaning in this case does not matter) is centred on the effect on the level of GDP, respectively on the GDP growth rate. Does the inclusion or exclusion of hidden economy estimates in the transition countries markedly affect any conclusion about the economic growth? How could informal economy influence on the economic growth?

In general, the following factors are likely to determine the extent to which informal economy plays a significant role in a country:

- (a) the role of the state and the range of instruments it uses to pursue that role: the more state influence in the economy, the more spread corruption;
- (b) the social characteristics of the society, that means the extent to which arm's length relationships prevail in social and economic relations. There is evidence that public officials are more likely to do favors to their relatives in societies where family ties are strong;
- (c) the nature of the political system;
- (d) the penalty system for acts of corruption.

It is a general impression that the increasing size of the informal economy causes significant losses to the economy, insecurity, and disorder. Corruption, for example, is found to lower investment efficiency and to alter the composition of government expenditure, specifically by reducing the share of spending on education.

The data in Table 9 give indications about existing positive correlation between corruption, rate of accumulation and rate of economic growth (e.g. Indonesia, China, Thailand, etc.). In general, the higher is the rate of accumulation, the more careful should be the government about the level of widespread corruption.

The erosion in a government's capacity to formulate and implement policies making for economic growth is an obstacle to economic progress. Corruption in general hinders the development of international trade and investment by rising transaction costs and distorting the operation of free market. Finally, in all its ramifications, corruption is likely to have negative implications for the stabilization role of the government (Rangelova, 1997b).

According to evidence, corruption makes lower the allocative efficiency, as follows:

- (a) it might reduce the effectiveness of aid flows through the diversion of funds, which is of particular relevance to transition countries;
- (b) it may bring about loss of tax revenue taking the form of tax evasion;
- (c) by affecting tax collection or the level of public expenditure, it may lead to adverse budgetary consequence or it may affect the composition of government expenditure;
- (d) it may worsen the allocation of talent;
- (e) it may lead to lower quality of public infrastructure and services. For example, corrupt bureaucrats could allow the use of cheap materials in the construction of buildings or bridges that would subsequently collapse.

In the transition countries two sides of the informal economy could be defined. For the "participants" in the first side the black economy offers the only chance of a livelihood during the difficult period. The other, far larger and economically and socially more important part of the informal economy is related to the rich middle and upper strata, who operate in the most dynamic sectors of the economy (Ehrlich, 1996, p.13).

There are already available techniques for estimating the magnitude of the informal economy. In particular, there are known five basic approaches to estimating the extent of the informal economy based on, as follows: voluntary surveys and samples, tax auditing and other compliance methods, discrepancies between income and expenditure, monetary approach, econometric analysis. All of them, however, are far from being perfect, i.e. still suffer from significant limitations.

There are not yet available data on informal economy in the transition countries over time. Since the SNA '93 version is implemented in these countries, however, which version for the first time includes accounting of the informal economy contribution, there are already some experimental data for the last years. This practice will be developed in the future. Until now, on the ground of indirect estimates we could conclude that during the past several years the proportion of the hidden economy to Bulgaria's GDP is at least 25-30%. This proportion for Hungary is estimated to 30% in 1992, for Poland 17-18% in 1995, etc. (Rangelova, 1996). According to other studies in Bulgaria the proportion of informal sector in 1997-1998 is about 40% in agriculture, 50% in transport and trade, 54% in service sector.

Tax evasion (TE) is a worldwide phenomenon and the dominating activity among the others forming hidden economy. It seems likely that the level of informal economy income is closely connected with tax evaded income.

TE became increasingly popular in the transition countries, in particular among newly created private firms. For example, according to official data for 1994, the private sector in Bulgaria generated nearly 40% of GDP, employed were 36% of the labour force, but paid only 3-5% of the taxes (Table 5).

There are publications using the modern growth theory and trying to integrate TE in models of economic growth. We will discuss shortly two models related to the topic concerned. In the case of East Asian economic growth a simple one-sector model of endogenous growth is used, deriving the necessary and sufficient condition under which an economy with TE obtains a larger rate of economic growth than an otherwise identical economy without TE (Chen, 1997). The author's initial assumptions are the following. When TE exists, tax revenue is reduced and therefore government expenditure services shrink. On the other hand, taxation of income harms economic growth hurting the incentives to form capital. It could be considered that TE increases disposable income of households, which in turn augments capital formation and thereby raises economic growth. The net effect depends upon whether the effect through increasing disposable income due to TE dominates the effect through shrinking government services and increasing the cost of TE and tax investigation. In the case where the effect of rising disposable income dominates, the rate of economic growth goes up.

The second model (Roubini and Sala-i-Martin, 1995) is rather different in comparison with the above-presented. In the former model the size of the government is allowed to alter, whereas in the latter a constant size of the government is specified. The results are different. The authors of the second model find that in a developing economy where the size of the government is constant and TE exists, the government will optimally choose to repress the financial sector in order to increase seigniorage taxation. This reduces the growth rate of the economy.

Let us remind that according to the first model described in an economy where the size of the government is variable and distortionary income taxation exists, TE raises individuals' disposable income and shrinks the size of the government. As a consequence, economic growth could be promoted. Thus the first model try to break the general impression that TE is at any rate detrimental to an economy. The results, however, should be interpreted with caution and need further development.

Concluding Comments

About the Modern Growth Theory:

Although there is a growing number of new empirical studies, some supporting Solow and more of them trying to support the new theory, we cannot yet say that there is a sharp distinction between the two alternatives. This could partly due to the fact that the existing tests are not yet powerful enough. For this reason authors like Helpman (1992) regard the neo-classical theory and the new one as “compliments rather than substitutes”. Or, as Crafts (1996, p. 36) says, “it is the spirit than the letter of the well-known models which is applicable”.

Actually, the modern growth theory has always been implicit in historical research and recent progress in economic theory formalizes some of these ideas and makes them more testable. In this aspect, better measurement and analysis of TFP growth stands out as a key requirement for adequately evaluating the contribution of endogenous growth models.

Many important issues like: international transfer of technology and growth, personal income distribution and growth, business cycles and long-term growth, economic infrastructure developments and growth, and so on are unexplored and wait for further research.

The state of knowledge concerning economic growth, in particular technical progress change has been predetermined more or less by the data available for studying and analysis. The increasing number of the empirical studies on the endogenous growth theory based on modern statistical techniques and accumulating statistical data over time are conducive factors for its further development.

The experience of the transition CEECs' economic performance until now outlines the great importance of the issues considered by the endogenous growth theory, i.e. a variety of determinants of the economic growth. The different views of these countries about the appropriate speed or ways of transition process implemented in different policies as well as their practical experience would help the subsequent development of theory. Meanwhile, a rich database (long-time series) for empirical studies will be created.

About the CEECs' Economic Growth:

There are increasingly encouraging signs that the process of transition in the CEECs is working and successful, and the next step will be actively promotion of economic growth there. In this aspect the modern growth theory could be very helpful tools.

Not only macroeconomic stability and privatization should be fulfilled, but also the social institutions of entrepreneurship have to be rebuilt because of the crucial importance of

entrepreneurial activity in the process of growth and development in these countries. Together with the disadvantage to build these institutions from the very beginning, i.e. on “a plain field”, the CEECs have the unique opportunity to build them and to create an economic environment that provides incentives for investment and growth, taking into account the experience of the advanced countries already gained.

The ultimate success of the adjustment and growth promoting efforts in the CEECs depends on their capacity to develop all market economy institutions necessary to support a market economy, as well as to establish a credible new framework for economic decision-making, including efficient coordination among them. Further progress is also needed to put in place the framework of instruments and institutions through which monetary policy can operate in a market economy.

These countries have to create the adequate environment for realizing to a higher degree their potential “social capability” in the efforts to achieve economic progress.

Applied theoretical and empirical economic research has to be an important component in economic policy realization in the transition countries. This will help to achieve both better governments and politics and better economics.

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Table 1: Real GDP and Real Gross Industrial Output, 1990-1997 (Indices, 1989=100)

Year	Czech Republic	Slovakia	Hungary	Poland	Bulgaria	Romania
Real GDP						
1990	98.8	97.5	96.5	88.4	90.9	94.4
1991	87.4	83.3	85.0	82.2	80.2	82.2
1992	84.5	77.9	82.4	84.3	74.4	75.0
1993	85.0	75.1	81.9	87.6	73.3	76.2
1994	87.3	78.7	84.3	92.1	74.6	79.2
1995	92.9	84.2	85.5	98.6	76.7	84.8
1996	96.5	89.7	86.6	104.6	69.0	88.2
1997	97.5	95.6	90.4	111.8	64.2	82.3
Real gross industrial output						
1990	96.5	96.0	90.7	75.8	83.2	81.9
1991	73.0	77.4	74.1	66.8	66.4	63.3
1992	67.2	70.3	66.9	69.4	54.2	49.4
1993	63.6	67.6	69.6	73.8	48.8	50.1
1994	65.0	70.9	76.2	82.8	54.0	51.7
1995	70.6	76.8	79.7	90.8	56.4	56.6
1996	72.0	78.7	82.4	98.3	58.6	62.2
1997	75.3	80.8	91.5	109.0	54.5	58.5

Source: Economic Survey of Europe, 1998. Economic Commission for Europe, United Nations, New York and Geneva, No 2, pp. 146 and 148.

Table 2: Basic Economic Indicators, 1990-1997 (Annual percentage change)

Year	Czech Rep.	Slovakia	Hungary	Poland	Bulgaria	Romania
Real GDP						
1980-89	..	..	1.5	0.5	3.6	1.7
1990	-1.2	-2.5	-3.5	-11.6	-9.1	-5.6
1991	-14.2	-14.5	-11.9	-7.0	-11.7	-12.9
1992	-6.4	-6.5	-3.1	2.6	-7.3	-8.8
1993	0.6	-3.7	-0.6	3.8	-1.5	1.5
1994	2.7	4.6	2.9	5.2	1.8	3.9
1995	5.9	6.8	1.5	7.0	2.1	6.9
1996	4.1	7.0	1.3	6.1	-10.9	3.9
1997	1.2	5.7	4.0	6.9	-7.4	-6.6
1998*	2.2	4.0	4.8	5.7	4.5	2.0
Industrial production						
1993	-5.0	-14.0	4.0	6.4	-2.2	1.3
1994	2.4	6.4	6.0	12.1	6.0	3.3
1995	9.2	8.3	4.8	9.7	1.7	8.9
1996	0.5	2.5	2.3	8.5	-6.0	8.5
1997	0.5	3.7	7.9	10.7	-15.4	-10.7
Agricultural output						
1990	-2.3	-7.2	-3.8	-2.2	-6.0	-2.9
1991	-8.9	-7.4	-6.2	-1.6	-0.3	0.8
1992	-12.1	-13.9	-20.0	-12.7	-12.0	-13.3
1993	-2.3	-14.1	-9.7	6.8	-18.3	12.8
1994	-6.0	13.7	3.2	-9.3	7.1	0.2
1995	5.0	4.4	2.6	11.7	16.0	4.9
1996	..	..	4.9	0.3	-13.3	1.8

Fixed capital formation

1990	6.5	5.2	-7.1	-10.6	-18.5	-35.6
1991	-26.8	-28.1	-11.6	-4.5	-19.9	-26.0
1992	8.9	-3.6	-2.7	-2.3	-7.3	11.0
1993	-7.7	-16.0	1.7	2.9	-17.5	8.3
1994	17.3	-4.0	12.2	9.2	1.1	20.1
1995	16.1	5.8	1.1	9.2	..	13.1

Unemployment rate

1990	0.7	1.6	1.7	6.1	1.8	1.3
1991	4.1	11.8	7.4	11.8	6.7	3.1
1992	3.1	11.3	10.7	12.9	13.2	6.2
1993	3.5	14.4	12.1	16.7	15.7	11.5
1994	3.3	14.6	11.4	16.5	12.8	11.0
1995	3.0	13.8	10.6	15.2	11.1	9.9
1996	3.1	12.6	11.0	14.3	12.5	7.5
1997	4.0	13.0	10.7	12.3	13.7	6.7

* Estimates of the International Monetary Fund.

Sources: World Economic Report, 1998. International Monetary Fund, Washington, D. C.; OECD CEECs database and Economic Survey of Europe in 1995-1996, pp. 77, 88 and 184; European Economy. European Commission. Supplement C. Economic Reform Monitor, No. 3 - September 1997 p. 2; National Statistical Institute in Sofia, Bulgaria.

Table 3: Inflation and Wages in CEECs, (Annual percentage change)

Year	Czech Republic	Slovakia	Hungary	Poland	Bulgaria	Romania
Consumer price increase						
1980-89	..	..	8.9	43.0	2.5	2.9
1990	9.7	10.4	28.6	585.8	23.9	127.9
1991	56.7	61.2	34.8	70.3	333.5	161.1
1992	11.1	10.0	22.8	43.0	82.0	210.4
1993	20.8	23.0	22.4	35.3	72.8	256.1
1994	10.0	13.4	18.8	32.2	96.0	136.7
1995	9.1	9.9	28.3	27.9	62.1	32.3
1996	8.8	5.8	23.5	19.9	123.0	38.8
1997	8.4	6.2	18.3	15.0	1089.4	154.8
1998*	11.0	5.0	13.0	11.0	35.0	5.4
Real wages						
1990	..	..	-3.7	-24.4	6.9	5.5
1991	-24.5	..	-4.0	-0.3	-39.4	-16.6
1992	10.1	..	-4.0	-2.7	19.2	-13.2
1993	3.7	-3.9	-0.5	-0.4	-8.7	-13.5
1994	7.7	3.2	3.1	3.2	-23.9	-2.0
1995	7.7	4.4	-12.2	4.5	-9.1	16.7

* Estimates of the International Monetary Fund.

Source: Economic Survey of Europe in 1995-1996 (1996), pp. 185 and 187; European Economy. Supplement C. Economic Reform Monitor. European Commission. No. 3 - September 1997, p. 3.

Table 4: Trade Balance of the CEECs, 1994-1998, (% of GDP)

	1994	1995	1996	1997*	1998*
Czech Republic	-1.5	-0.8	-11.5	-12.0	-12.4
Slovakia	0.6	-1.1	-11.1	-13.4	-14.9
Hungary	-8.7	-5.8	-6.1	-6.3	-6.6
Poland	1.4	-1.6	-6.2	-7.8	-9.5
Bulgaria	-0.2	0.9	1.6	1.2	1.1
Romania	-1.7	-4.6	-4.6	-4.2	-1.4

* Estimates of the EC. Source: European Economy. European Situation and Economic Reform in Central and Eastern Europe. Supplement C, Economic Reform Monitor. European Commission, No 2, June 1997, p.2.

Table 5: Private Sector Contribution to GDP and Employment (in %)

	Czech Rep.		Hungary		Poland		Bulgaria		Romania	
	GDP	Empl.	GDP	Empl.	GDP	Empl.	GDP	Empl.	GDP	Empl.
1990	12	..	25	..	31	..	9	6	16	..
1991	17	..	30	..	42	..	12	10	24	..
1992	28	31	42	48	45	56	16	19	26	41
1993	45	47	50	53	48	59	35	28	32	44
1994	56	53	60	..	70	..	39	36	39	..
1995	64	..	68	..	75	..	48	41	45	..
1996	74	..	75	..	78	..	52	47	50	..
1997	..	..	..	..	..	..	59	53	..	..

Sources: Czech Republic 1996, Basic Socio-economic Indicators ed. by F. Tumovec, Center for Economic Research and Graduate Education of Charles University & Economics Institute of the Academy of Sciences of the Czech Republic, Prague, 1997, p. 5. The data source for Bulgaria is the National Statistical Institute in Sofia.

Table 6: Debt Indicators for CEECs (%)

Country	Ratios of		
	External debt		Debt service to exports
	to exports		
Former Czechoslovakia			
1985		12.8	34.7
1989		17.5	48.9
1990		20.2	59.8
1991		29.5	71.1
1992		23.8	44.5
1993		27.5	88.4
1994		30.7	96.6
Czech Republic			
1992		20.7	..
1993		27.2	..
1994		29.7	55.0
1995		35.8	77.0
1996		40.3	94.0
1997		..	94.0
Slovakia			
1994		..	47.9
1995		..	53.1
1996		..	71.6
1997		..	73.0

Hungary

1985	70.6	139.4	36.8
1989	73.4	159.4	27.9
1990	67.2	186.3	37.0
1991	71.2	185.6	32.8
1992	62.3	171.5	38.7
1993	67.1	227.9	40.8
1994	75.7	219.8	35.9
1994	..	375.0	..
1995	..	250.0	..
1996	..	185.0	..

Poland

1985	48.7	278.7	17.1
1989	54.5	292.1	10.4
1990	83.8	265.6	5.2
1991	70.0	351.9	9.3
1992	59.2	300.2	9.3
1993	52.7	283.0	10.6
1994	48.0	218.9	10.1
1994	..	249.0	..
1995	..	192.0	..
1996	..	166.0	..
1997	..	150.0	..

Bulgaria

1985	22.0	32.3	9.9
1989	48.0	114.1	29.9
1990	57.0	239.3	30.4
1991	124.3	330.7	7.5
1992	118.3	281.8	9.6
1993	124.9	235.6	5.7
1994	106.8	194.6	7.1
1994	..	220.0	..
1995	..	151.0	..
1996	..	159.0	..
1997	106.0	212.4	22.6

Romania

1985	14.9	63.5	18.7
1989	2.6	9.4	16.3
1990	3.1	17.5	0.1
1991	7.5	42.6	2.2
1992	14.9	71.5	9.0
1993	18.1	78.1	6.2
1994	22.6	94.0	11.1
1994	..	54.0	..
1995	..	59.0	..
1996	..	90.0	..

Sources: World Economic and Social Survey 1995 (1996), p. 336. Data for 1994 are estimates; European Economy. Economic situation and economic reform in Central and Eastern Europe. Supplement C, Economic Reform Monitor. European Commission. No. 3 - September 1997.

Table 7: Labor Productivity in CEECs Transition Countries, 1989 = 100 (Real GDP per employee)

	Czech Republic	Slovakia	Hungary	Poland	Bulgaria	Romania
1990	99.7	99.3	99.6	92.3	96.8	95.4
1991	93.4	97.0	96.9	91.2	98.3	83.4
1992	92.6	89.7	103.6	97.7	99.2	78.5
1993	94.8	88.8	108.3	103.9	99.3	82.9
1994	96.6	99.0	114.1	108.2	100.4	86.6
1995	100.1	98.2	117.8	113.7	102.0	97.8
1996	103.3	102.3	119.3	118.4	91.6	102.9
1997	105.5	..	..	..	76.7	..

Source: Calculated on the database in Economic Survey of Europe, 1998. Economic Commission for Europe, United Nations, New York and Geneva, No 2, pp. 146 and 148.

Table 8: The CEECs: Selected Macroeconomic Indicators, 1991-1996

	1991	1992	1993	1994	1995	1996
<i>Real interest rates (in percent a month)</i>						
Czech Republic	..	..	-0.5	-0.1	0.1	0.2
Slovakia	..	..	-0.8	0.1	0.3	0.1
Hungary	..	0.1	0.2	0.4	0.3	0.7
Poland	..	-0.1	-0.2	0.2	0.7	0.5
Bulgaria	..	-0.6	-0.2	-0.7	1.8	-0.9
Romania	..	..	..	1.6	1.5	-0.5
<i>Growth rate of broad money (in percent)*</i>						
Czech Republic	..	..	..	19.9	19.8	9.2
Slovakia	..	..	..	17.4	18.4	16.2
Hungary	29.4	27.3	16.8	13.0	18.5	20.9
Poland	37.0	57.4	35.9	38.3	34.7	29.3
Bulgaria	..	50.4	53.5	77.9	39.6	124.3
Romania	101.2	79.6	141.0	138.1	71.6	66.0
<i>Dolarisation ratios**</i>						
Czech Republic	7.9	9.3	8.1	7.2	6.4	7.6
Slovakia	3.1	6.3	11.5	13.0	11.1	10.0
Hungary	16.5	14.3	18.7	20.4	26.6	24.2
Poland	24.7	24.8	28.8	28.6	20.4	17.3
Bulgaria	33.4	23.4	20.3	32.6	27.2	50.5
Romania	3.9	17.9	29.0	22.1	22.6	23.4
<i>Net capital inflows (in percent of GDP)***</i>						
Czech Republic	..	-1.3	6.8	6.1	17.8	6.6
Slovakia	..	-5.0	2.0	7.4	6.7	7.4
Hungary	..	1.2	15.7	8.2	17.3	0.5
Poland	..	-1.7	-0.9	-0.6	4.1	2.3
Bulgaria	..	-5.7	-2.5	1.1	3.9	-8.9
Romania	..	..	5.8	4.3	3.7	4.3

* Broad money (currency outside banks, demand deposits, and time and savings deposits) including foreign currency deposits.

** The dolarisation ratio is the ratio of foreign exchange deposits to broad money, including foreign currency deposits.

*** Net capital inflows are defined as the balance on financial account in the balance of payments, excluding changes in international reserves, plus net errors, and omissions.

Source: World Economic Outlook, October 1997. World Economic and Financial Surveys. International Monetary Fund, pp. 101, 100, 112, 113.

Table 9: The TI Corruption Index Number for 1997, Rate of Accumulation (Investment/GDP ratio) and Real GDP Growth, 1990-1997 for Selected Countries

Country	Corruption index	Rate of accumulation	Real GDP growth rate
Denmark	9.94	18.6	2.7
Finland	9.48	16.9	1.5
Sweden	9.35	15.6	0.5
New Zealand	9.23	18.8	3.5
Canada	9.10	18.2	2.4
The Netherlands	9.03	19.8	2.4
Norway	8.92	20.8	4.0
Australia	8.86	20.4	3.8
Singapore	8.66	34.6	8.6
Switzerland	8.61	21.9	0.2
Ireland	8.28	16.6	6.4
Great Britain	8.28	15.5	2.3
Germany	8.23	21.7	1.5
USA	7.61	13.5	2.8
Austria	7.61	24.8	1.8
Hong Kong	7.28	29.7	5.3
Portugal	6.97	24.3	3.8
France	6.66	18.7	1.4
Japan	6.57	29.5	1.4
Hungary	5.90	20.3	0.2
Greece	5.35	20.2	0.3
Belgium	5.25	17.9	1.5
Czech Republic	5.20	30.8	2.9
Poland	5.08	17.9	3.5
Italy	5.03	17.8	1.0
South Africa	4.95	17.0	1.7
Spain	4.35	20.9	1.7
South Korea	4.29	36.5	6.8
Brazil	3.56	20.0	3.4
Turkey	3.21	24.0	4.5
Thailand	3.06	39.8	6.5
The Philippines	3.05	22.6	3.7
China	2.88	33.3	12.7
Argentina	2.81	17.6	5.4
Venezuela	2.77	17.9	2.0
India	2.75	22.6	6.6
Indonesia	2.72	32.3	6.9
Mexico	2.66	18.5	1.7
Pakistan	2.53	17.6	4.4
Russia	2.27	21.4	-7.0
Bangladesh	1.80	14.4	4.8
Nigeria	1.76	10.7	2.2

Note: The Transparency International elaborates The TI corruption indices. A scale is used from 0 to 10, where 10 means total absence of corruption. The good position of Singapore along with the developed countries could be explained by this country's experience simply to ban companies and businessmen guilty of corruption. This index for Bulgaria in 1998 is 2.9.

Sources: Tanzi, V. (1998) Corruption Around the World: Causes, Consequences, Scope, and Cures. International Monetary Fund. Working Papers, No 63, WP/98/63; International Financial Statistics Yearbook, 1998. International Monetary Fund, Washington, D.C.

Some Empirical Developments of the Estonian Legal Environment¹

Lia Vensel and Vello Vensel

1. Introduction

Business firms operate in a certain environment in which they interact with other firms, individuals, governmental and other institutions, various interest groups. It is not surprising that issues in the market and non-market business environment are actual in the Western countries (see, for example, Baron (1993)), but these problems are more important to study in emerging market economies in CEECs. In the conditions of these transition economies not all market structures are yet well-developed (for example, development of financial markets), and market forces are functioning weakly. Lessons from the stabilization and liberalization programs adopted on the CEECs have shown that not everything is coming according to the traditional economic theory and from the “mainstream” economic models. Transition countries now need to implement “second generation” reforms aimed at improving the quality and efficiency of the government, including improvements in the legal and institutional framework (see World Bank (1998)).

There are several obstacles hindering the transformation of former centrally-planned economies into well-functioning market economies. The business environment in transition countries is dynamic and dramatically changing. It is understandable if we remember long list of main objectives during the transition period (see also, for example, Hillman (1994), Citrin and Lahiri (1995), Banerjee et al. (1995), Zecchini (1997), Pohl (1997) etc.):

- * privatization and restructuring of the former state-owned enterprises in all industries;
- * development of private sector to establish a competitive business environment, replacing planned allocation of resources and concentrated production;
- * restructuring of the financial sector, especially development of private commercial banking system, and development of the financial markets;

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- * liberalization of prices, capital movements, and international trade regime;
- * monetary reform and introducing a stable convertible domestic currency;
- * defining the new role of government, development of budgetary discipline, introducing market-oriented fiscal instruments and social security programs etc.

All these transition activities, plus appropriate institution-building, political democratization, changes in value appraisal and behavior of individuals and economic agents, cause rapid changes in the business environment influencing, by the way, firms financing and investment decisions. It is also important to emphasize that all these changes must be flexible, ready to meet unexpected developments in the basic structures of an emerging market economy. Institutional and environmental changes require substantial changes in individual attitudes: all agents in the economy (producers-consumers, owners-workers, firms-households etc.) will have to change radically their economic thinking and behavior.

In the following paper we present some results of the special interview study of Estonian manufacturing firms undertaken in 1997. The study was designed for capturing and quantitative measurement of the state and changes in Estonian business environment, focusing on the study of financial contractual relationships of Estonian manufacturing firms (market environment aspect), but also including issues of the regulation mechanism, disputes resolution mechanism etc. (non-market aspect). Our main attention was paid to the most important factors influencing business firms financing and investment decisions. An another smaller special questionnaire was focused on the civil servants' behavior, law making procedures, and law enforcement mechanism, which is similar to Borner, Brunetti and Weder (1995) approach.

Although most important steps have been taken toward creating a favorable business environment for new business activities and growth (full liberalization of prices, interest rates and trade regime; successful monetary reform, tight monetary policy and high fiscal discipline; moderate governmental regulations; restructuring and rapid development of the commercial banking sector, etc.), and in the privatization and restructuring of Estonian manufacturing sector (see, for example, Vensel (1996), Grennes (1997)), there are a number of problems hindering economic recovery and growth. Now there exists experience of restructuring various sectors of the transition economies (Mullineux (1995), Zecchini (1997), Sorsa (1997), Krzak (1998), Lizal and Svejnar (1998), Konings and Repkin (1998)), which results are possible to compare with the same processes in Estonian economy.

Conflict resolution mechanism and regulatory mechanism are both important components of the legal infrastructure, and economical policy outcomes in this field reflect directly on the firms' level. We present some results of Estonian manufacturing firms interview study undertaken in 1997. The 1997 interview study was a logical continuation of the analogical studies undertaken during 1994-1996 (Vensel and Wihlborg (1998), Tammeraid, Teearu and Vensel (1998)), and it is already possible to follow some trends in changes. Forty-nine firms responded to questionnaires during interviews, but not all to all questions. Responded firms were mostly privately owned small and medium-size joint stock companies from different industries and from various Estonian industrial regions. The questionnaire focused particularly on the development of financial contractual relations,

infrastructure, regulation mechanism, disputes resolution mechanism, and business supporting services.

Legal system underdevelopment is mentioned by different authors as one of the more important restrictions for the economic growth in transitional and developing countries, see, for example, Borner et al. (1995), Buckberg (1997). Empirical results of studies have been shown a strong impact of improved policies on economic growth and on the desire to invest in the country, see Selowsky and Martin (1997), Fisher et al. (1996), Sachs (1996), De Melo and Gelb (1996) etc. Among the most relevant legal infrastructure underdevelopment issues are mentioned: (1) major areas of law are incomplete; (2) the judiciary lacks independence and specialization; (3) courts have no mechanisms to enforce their decisions. Recent studies in developing and transition countries have shown that public sector corruption is the most severe impediment to development and growth processes in these countries (Gray and Kaufmann (1998), Kaufmann (1997), Harberger (1998), Barro (1997)).

We present also the main results of the special interview study of Estonian entrepreneurs and managers in order to study civil servants behavior, law making procedures and operating of the law enforcement mechanism in Estonia.

2. Sample General Characteristics

Most important general characteristics of sample firms are presented in the Table 1: distribution of sample firms by industries, by production location, by legal status, by ownership structure, by start-up year, by firms size, and by sources of firms start-up financing. Sample covers more important industries of Estonian economy, quite typical for a small country is that more than one half of manufacturing output is produced in the capital and surroundings.

Main changes are decreasing share of state-owned enterprises and corresponding increasing share of corporates and limited liability enterprises due to the privatization process, if we compare distribution of firms by the legal status in different years. We may mention the diminishing share of state ownership and increasing share of private ownership, both only domestic and mixed domestic and foreign private ownership. Average share of foreign ownership in the last group of firms was 43%. Most of the included in the sample firms started after year 1990 and the start-up financing of firms came mostly from own savings because their access to the loan market was limited. Most of sample firms were medium size firms with the number of permanent workers 21-200.

As a generalization we may argue that mostly the sample consists of small (36%) and medium-size (55%) domestically owned private (75%) joint stock companies (78%) which started on the basis of own savings (58%) after the year 1990 (72%) and which are operating in Tallinn (49%) and in Northern-Estonia (28%).

Table 1. General Characteristics of Sample Firms

Characteristics	1994	1995	1996	1997
<i>1. Distribution by industries:</i>				
Light industry	7 (17,9%)	5 (10,9%)	5 (11,4%)	4 (8,3%)
Food industry	7 (17,9%)	4 (8,7%)	7 (15,9%)	6 (12,5%)
Construction industry	4 (10,3%)	4 (8,7%)	5 (11,4%)	4 (8,3%)
Transportation	3 (7,7%)	7 (15,2%)	2 (4,5%)	2 (4,2%)
Wood-proceeding industry	3 (7,7%)	3 (6,5%)	3 (6,8%)	3 (6,3%)
Metal-proceeding industry	4 (10,3%)	1 (2,2%)	4 (9,1%)	4 (8,3%)

Trade industry	4 (10,3%)	9 (19,5%)	10 (22,7%)	15 (31,3%)
Other industries	7 (17,9%)	13 (28,3%)	8 (18,2%)	10 (20,8)
2. Distribution by production location:				
Tallinn (the capital)	15 (38,5%)	24 (57,1%)	24 (51,0%)	24 (49,0%)
North Estonia	16 (41%)	11 (26,2%)	10 (21,3%)	14 (28,6%)
South Estonia	6 (15,4%)	5 (11,9%)	10 (21,3%)	7 (14,2%)
Other regions	2 (5,1%)	2 (4,8%)	3 (6,4%)	3 (8,1%)
3. Distribution by legal status:				
Corporate	25 (65,8%)	36 (80%)	40 (83,3%)	38 (77,6%)
State-owned enterprise	7 (18,4%)	3 (6,7%)	1 (2,1%)	1 (2,0%)
Limited liability enterprise	3 (7,9%)	3 (6,7%)	3 (6,3%)	7 (14,3%)
Partnership	1 (2,6%)	2 (4,4%)	1 (2,1%)	1 (2,0%)
Sole proprietorship	1 (2,6%)	1 (2,2%)	1 (2,1%)	0
Subsidiary of a corporation	2 (5,3%)	0	2 (4,1%)	2 (4,1%)
4. Distribution by ownership structure:				
Domestic private owners	23 (59%)	32 (72%)	42 (88%)	37 (75%)
Domestic and foreign private	6 (15%)	8 (18%)	2 (4%)	10 (21%)
State ownership	7 (18%)	2 (5%)	0	1 (2%)
State, domestic and foreign private	1 (3%)	2 (5%)	1 (2%)	0
Foreign private owners	0	0	2 (4%)	0
State and domestic private	2 (5%)	0	1 (2%)	1 (2%)
5. Distribution by start-up year				
Started before 1980	7 (18%)	5 (10,6%)	7 (15,2%)	4 (8,7%)
Started 1981-1990	3 (7,7%)	3 (6,4%)	3 (6,5%)	9 (19,5%)
Started 1991	13 (33,3%)	10 (21,3%)	11 (23,9%)	11 (23,9%)
Started 1992	8 (20,5%)	12 (25,5%)	8 (17,4%)	11 (23,9%)
Started 1993	8 (20,5%)	11 (23,4%)	9 (19,6%)	5 (10,9%)
Started 1994	0	6 (12,8%)	7 (15,2%)	5 (10,9%)
Started 1995	0	0	1 (2,2%)	1 (2,2%)
6. Size distribution of sample firms:				
Small, 1-20 workers	7 (20,6%)	(38,1%)	15 (32,6%)	17 (36,2%)
1-5	3	7	5	4
6-10	2	5	6	8
11-20	2	4	4	5
Medium, 21-200 workers	19 (55,9%)	17 (40,5%)	23 (50%)	26 (55,3%)
21-50	8	7	9	16
51-100	6	6	6	4
101-200	5	4	8	6
Large, 201-...	8 (23,5%)	9 (21,4%)	8 (17,4%)	4 (8,5%)
201-500	6	7	6	3
500-...	2	2	2	1
7. Distribution by sources of start-up financing (%)				
Own savings	57,9	63,6	51,6	57,5
Loan from domestic bank	10,5	11,4	10,9	1,0
Loan from relatives, friends	8,0	9,2	6,2	3,3
Loan from foreign bank or donor agency	2,6	6,8	1,6	0,8
Loan from money-lender	10,5	4,5	4,7	3,7
Other sources (parent firm, loan from supplier, foreign partner, etc.)	10,5	4,5	25,0	33,7

3. Regulation Mechanism

1. *Ownership Regulations:* 9 firms (18.3% of responded firms) reported that government regulations affect their ownership structure. Some firms were of the opinion that regulatory acts require reduction of the state ownership, there is needed raising of the equity, and ownership change procedures are very complicated. Average estimates of the relevance of various regulations to the operating of the firm (5-point scale: 1 - no relevant, 5 - relevant) were as follows in the Table 2.

Table 2. Average estimates of the Relevance of Various Regulations/Restrictions to Firms Various Decisions

Regulations/Restrictions	1994	1995	1996	1997
1. Relevance of restriction to firms operating decisions:				
Domestic finance restrictions	2.2	1.7	1.6	1.98
Earnings repatriation restrictions	2.0	1.5	1.2	1.40
Restrictions on the activities	1.7	1.5	1.5	1.32
Capital requirements	1.7	1.5	1.9	1.66
Exchange restrictions on business travels	1.7	1.3	1.2	1.21
Foreign loan restrictions	1.7	1.9	1.5	1.27
Restrictions on technology licenses and royalties	1.6	1.2	1.3	1.12
Joint venture restrictions	1.3	1.0	1.0	1.34
Restrictions on payment of salaries to non-residents	1.2	1.6	1.4	1.29
2. Relevance of hindrances in the case of reducing production:				
Large financial cost of firing workers	3.1	3.5	3.5	2.35
Government restrictions against firing workers	1.9	1.6	2.0	1.40
Trade union restrictions against firing workers	1.4	1.2	1.5	1.29
3. Relevance of hindrances in the case of closing down the business:				
Large financing cost of firing workers	3.0	3.3	3.1	2.58
Legal procedure of bankruptcy or liquidation	1.9	2.4	2.1	2.00
Government restrictions against firing workers	1.8	2.5	2.7	1.87
Government restrictions on selling the enterprise	1.4	2.4	1.6	1.65
Trade union restriction against firing workers	1.3	1.4	1.6	1.38
4. Relevance of restrictions affecting firms expansion decisions:				
Obtainability of credits	3.5	4.2	3.1	2.34
Taxes	3.0	4.1	3.5	2.98
1) Getting investment facilities	3.7	3.4	3.7	3.41
2) Prices of public services	2.2	2.5	2.3	2.32
3) Lack of demand for output	3.1	2.4	2.9	2.63
4) Infrastructure and location problems	1.4	2.2	2.1	2.00
5) Ownership regulations	2.2	2.1	1.8	1.53
6) Competition with imports	2.9	2.0	2.4	2.69
7) Lack of business supporting services	2.6	1.9	1.8	1.80
8) Labor regulations	1.7	1.5	1.6	1.39
9) Price controls	1.6	1.5	1.14	1.37
10) Getting licenses	1.5	1.5	1.5	1.64
11) Activities restrictions	1.3	1.3	1.3	1.15
12) Exchange controls	1.3	1.1	1.05	1.05

2. Labor Regulations: Most of interviewed firms were of the opinion that labor regulations did not affect their hiring and firing decisions:

- (1) reducing of minimum wages will not affect the hiring decisions - 46 firms (93.9%);
- (2) removal of firing restrictions and compensation payments - 42 firms (85.7%) will remain the same number of permanent workers;
- (3) removal of hiring restrictions - 46 firms (94.0%) will remain the same number of workers;
- (4) liberalization in the hiring laws of foreign labor - 44 firms (90.0%) will not hire more workers.

Average estimates of the relevance of hindrances in the case of reducing production (5-point scale: 1 - no relevant, 5 - relevant) are also presented in the Table 1. There are also average estimates of the relevance of hindrances in the case of closing down the business (5-point scale).

3. *Price and Exchange Controls:* The opinion of firms on the price controls affecting the business (share of responded firms, which answered “Yes” to this question). and average estimates of the relevance of problems with foreign currency exchange (5-point scale: 1 - no problems, 5 - great problems) are presented in Table 3.

Table 3. Estimates of Price Control and Relevance of Problems with Foreign Currency Exchange

Other Party	1994	1995	1996	1997
1. Price control estimates, %:				
a) Input prices	34.2	46.7	51.2	43.8
b) Output prices	24.0	13.2	8.8	11.1
2. Relevance of problems with foreign currency exchange:				
Delays in obtaining foreign currency	1.4	1.1	1.08	1.04
Required documentation	1.15	1.14	1.08	1.02
Obtainability of foreign currency	1.15	1.05	1.03	1.00

4. *Expansion Regulations:* Average estimates of the relevance of regulations/restrictions affecting firms' expansion decisions (5-point scale: 1 - no obstacle, 5 - very severe obstacle) are also presented in Table 2.

Three most important first-order restrictions were mentioned both getting investment facilities and taxes (both 8 answers), and lack of demand for output (7 answers). Second-order restrictions were taxes (9 answers), getting investment facilities, lack of demand and competition with imports (all 6 answers).

The same was mentioned as third-order restrictions: getting investment facilities (6 answers), taxes, but also lack of skilled labor (both 5 answers). In general, most important restrictions were mentioned: taxes (22 answers), getting investment facilities (20 answers), competition with imports (16 answers), lack of demands (15 answers), and obtainability of credits (12 answers).

5. *Capacity Utilization:* Firms were of the opinion that there exists low production capacity utilization in Estonian manufacturing sector: the production amount could be in average 17.3% higher (37% in 1996 year study), if taking into account restrictions on labor supply and output demand - 6.7% (in 1996 year study 12%). Ten firms applied for export compensation (20%), and 7 of them received these compensations. Five firms applied for getting other compensations or subsidies, and two of them received (from the Export Council and from Environment Ministry).

6. *Licensing and registration:* Almost all interviewed firms were registered; only two of them answered “No”. To get licenses or activities permissions is not very complicated and expensive. Problem is that the list of licensed activities has grown during last years. There are a number of special licenses for various business activities, which is needed to obtain. From more general licenses interviewed firms have:

export licenses - 40% of responded firms;
 general import licenses - 22.6% of responded firms;
 specific import licenses - 20.7% of responded firms

4. Disputes Resolution Mechanism

1. Late Payments and Non-Payments by Clients: 39 firms (81.3%, in 1996 study 87%) of responded firms have had late payment or non-payment problems during last year, most of firms 1-5 disputes during the year. The main reasons for late payment or for non-payment were clients' payment difficulties, bankruptcies and lack of consideration against business partners. Distribution of late payment or non-payment disputes by other party is presented in the Table 4.

Table 4. Distribution of Disputes by the Other Party

Other Party	1994	1995	1996	1997
<i>1. Disputes with suppliers</i>				
Other domestic firm	22 (67%)	29 (78%)	35 (88%)	35 (88%)
Government institution	6 (18%)	2 (6%)	1 (2%)	1 (2%)
Foreign firm	5 (15%)	3 (8%)	3 (8%)	3 (8%)
Individual	0	3 (8%)	1 (2%)	1 (2%)
<i>2. Disputes with clients</i>				
Other domestic firm	8 (61%)	16 (80%)	19 (73%)	10 (45%)
Foreign firm	4 (31%)	2 (10%)	7 (27%)	12 (55%)
Individual	1 (8%)	0	0	0
Governmental institution	0	2 (10%)	0	0

In 12 cases (25%) it was the first transaction with the other party, the duration of business relations with this other party was in general short, 1-3 years. In 80% of reported disputes' cases direct bargaining with the other party was used, only 1 arbitration usage case was reported. A layer was hired to resolve the conflict in 8 cases only (30 "No" answers), and in 11 cases the firm went to the court. The dispute was settled in 20 cases (50%), but only 17 firms (43.6%) were satisfied with the outcome and 22 firms were not satisfied. 14 firms (41%) are still doing business with the other party.

2. Late Delivery and Deficient Quality of Inputs/Services: 18 firms (37.5%, in 1996 study 46.7%) have had problems with late delivery or non-delivery of inputs/services and also 18 firms have had problems with the deficient quality of inputs/services. The number of times, firms have had these problems with suppliers during the last year, fluctuated mainly between 2-5, but some firms have had such disputes with suppliers 10 and more times. Distribution of delivery and quality of input disputes with the other party is presented also in Table 4.

Remarkable is the growing share of foreign firms as the other party. Only 3 firms reported that it was the first transaction with the other party, duration of business relations with the other party was mainly between 1-3 years. Direct bargaining with the other party was used

in 91 % cases; private arbitration was not used. In 2 cases a lawyer was hired and the firm went to the court.

Disputes were mostly settled (82.6% of cases), and 73.9% of firms were satisfied with the outcome. In 18 cases firms are still doing business with the other party.

3. Labor Disputes, Disputes with Competitors, Governmental Institutions, and Commercial Banks: 6 firms (12.2%, in 1996 year study 19.1%) reported having labor disputes during the last year. Labor disputes were connected with the problems of the amount of salary and with legal problems of firing employees, in all cases the other party was an individual. In 4 cases direct bargaining with the other party was used, and in 2 cases the firm hired a lawyer, but only one firm went to the court. In 5 cases (83.3%) disputes were settled, 4 firms were satisfied with the outcome, and 2 firms are still doing business with the other party.

10 firms (20.4%, in 1996-year study 14.9%) reported having disputes with their competitors during the last year. The main reasons for these disputes were the usage of dumping by competitors, unethical competition, and breaking agreements. These disputes were mostly not settled. 13 firms (26.5%, in 1996-year study 18% of firms) have had disputes with the governmental institutions, in 4 cases the other party was the tax authority, and in 5 cases customs office. The main reason of disputes was different interpretation of laws and other legal acts. In 7 cases direct bargaining was used, disputes were settled in half of cases, but a few firms were satisfied with the outcome (15.4%).

Six firms (12.2%) reported having disputes with commercial banks during the last year; main reason of these disputes was late transfer of payments by the bank. Disputes were settled in 3 cases and in these cases firms were satisfied with the outcome, 5 firms are still doing business with the other party/bank.

4. Legislation and Enforcement Mechanism: 22 firms (45.8%, in 1996 year study only 32.5% of responded firms) were of the opinion that Estonian legislation is sufficient for the resolution of disputes and conflicts between economic agents, while remaining responded 26 firms found legislation insufficient because of contradictions in Estonian legal acts, also over-regulations and willfulness of civil servants were mentioned. The Business Law and the Bankruptcy Law were mainly mentioned as weak and controversy legal acts, there is not existing debt legislation in Estonia.

5.

24 firms (49%, in 1996-year study only 31.6% of responded firms) were satisfied with the enforcement mechanism. Firms were of the opinion that legal acts must ground on the real life not on the ideal theoretical framework that is not possible to set into operation, not all needed relationships between economic agents are regulated, weak court system was also mentioned. Twenty-six firms (65% of responded firms) supported the usage of self-enforcement mechanisms (negotiations, direct bargaining etc.).

We may mention a slight decrease of the number of different disputes between economic agents during last years. But although the legal framework seems to be improved (a little more firms are satisfied with the Estonian legislation and enforcement mechanism), the overall situation in the development of the legal framework is not yet satisfactory.

5. General Sample Characteristics of Another Questionnaire

At all 85 respondents answered to the questionnaire on the government agencies behavior, law making procedures, and law enforcement mechanism. Distribution of respondents by their profession was as follows:

- (1) owner, managing director or other top-manager - 41 respondents (48.2%)
- (2) medium-level manager - 22 respondents (25.9%)
- (3) high-skilled specialist - 22 respondents (25.9%)

Distribution of respondents by their firm location was following:

- (1) Tallinn (the Capital of Estonia) - 48 respondents (56.5%)
- (2) other bigger Estonian town - 15 respondents (17.6%)
- (3) small town - 16 respondents (18.8%)
- (4) village, rural place - 6 respondents (7.1%)

Respondents were occupied in the following industries:

- (1) manufacturing industries - 28 respondents (32.9%)
- (2) other productive industries - 13 respondents (15.3%)
- (3) trade, transportation, communication services - 17 respondents (20.0%)
- (4) other services - 27 respondents (31.8%)

We may conclude that respondents represent different business professions (mainly top-managers), they were occupied in various industries and their firms located mostly in the capital (in Tallinn). There were no significant differences between the answers and estimates given by different respondents.

6. Government Agencies Behavior

Five questions were given to evaluate government agencies or civil servants' behavior. Five variables in the Table 5 were formulated on the basis of these questions. For example, the variable "Civil Servants' Willfulness" is a result of the question: "Please evaluate the following quotation for Estonia: *"Laws and regulations are so complicated, unclear and sometimes even contradictory that it is impossible to adhere to them on a regular basis. Therefore, civil servants can always find ways and means to give you a hard time (long delays, arbitrary decisions etc.)."* This happens: never (1), rarely (2), sometimes (3), frequently (4), mostly (5), or always (6)."

Table 5. Estimates of Government Agencies, Law Making and Law Enforcement

	Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)	Mostly (5)	Always (6)	Average	St. Deviation
1. Government Agencies Behavior:								
1. Civil servants' willfulness	0	3	25	38	16	3	3.89	0.87
2. Will to resist, fight back	6	27	26	6	8	12	3.22	1.52
3. Civil servants' power	3	24	31	21	3	3	3.07	1.07
4. Knowing the civil servants - speeding up the procedure	1	2	11	34	21	16	4.41	1.08
5. Knowing the civil servants - influencing his decision	8	12	26	23	12	4	3.37	1.29
2. Law making procedures:								
1. Unexpected changes in law	0	21	35	19	8	2	3.24	1.01
2. Information availability	3	26	26	16	13	1	3.15	1.16
3. Possibilities to consult	37	31	12	3	2	0	1.85	0.96
4. Government's announcements credibility	3	29	34	15	4	0	2.86	0.92
3. Law enforcement mechanism:								
1. Objectivity of courts	1	12	37	24	11	0	3.38	0.93
2. Power of money on the decisions	0	7	20	33	18	7	3.98	1.06
3. Knowing the judge personally	2	19	34	22	5	3	3.21	1.05
4. Turning to a higher court	0	4	14	6	24	37	4.89	1.26

Civil servants willfulness was evaluated by respondents as frequent phenomenon (average estimate 3.89, standard deviation low, 0.87). 38 respondents (44.7%) answered to this question that this happens frequently, 25 respondents (29.4%) answered that this happens sometimes, and 16 respondents (18.8%) were on the opinion that this happens mostly. It is quite notable that no one respondent answered to this question that this happens never. We may conclude that civil servants willfulness is a serious problem in Estonian society.

Other variables were formulated on the same way on the basis of specific questions. It is also interesting to look interrelations (correlation coefficients) between different variables characterizing civil servants behavior. The variable "Knowing the civil servant - influencing his decision" is significantly connected with all other variables:

- * with "Knowing the civil servant - speeding up the procedure, $r = 0.462$
- * with "Civil servants' willfulness", $r = 0.331$
- * with "Will to resist, fight back", $r = -0.292$
- * with "Civil servants' power", $r = 0.249$

Quite logically, will to resist and fight back with civil servants' willfulness be negatively correlated with the problem of knowing personally civil servants, which will influence their decisions. There was also significant positive correlation between variables "Civil servants' willfulness" and "Civil servants' power", $r = 0.340$. These significant correlations also give the proof of the trustworthiness of respondent's answers.

7. Law Making Procedures

There were four variables characterizing law-making procedures in Estonia. These variables presented in Table 5 are as follows. For example, the variable "Unexpected

Changes in Law” is a result of the question: “As an entrepreneur, do you regularly have to cope with unexpected changes in laws and/or policies which could seriously affect your business? Changes in the law and policies are predictable: never, i.e. changes are completely unpredictable (1), rarely, i.e. mostly unpredictable (2), sometimes, i.e. frequently unpredictable (3), frequently, i.e. fairly predictable (4), mostly, i.e. highly predictable (5), always, i.e. completely predictable (6).”

Changes in laws and/or policies were evaluated by respondents as sometimes unpredictable (average estimate 3.24 and standard deviation quite low, 1.01). 42.2% of respondents answered that these changes are frequently unpredictable, 24.7% that mostly unpredictable, and 22.4% that fairly unpredictable. Two respondents were on the opinion that changes in laws and policies are completely predictable. In general, entrepreneurs have to cope with unexpected changes in laws and policies, which could affect their business, quite frequently in the conditions of unstable economic environment.

Other law making variables were formulated on the basis of other specific questions. It is also interesting to look interrelations between these four variables. There were two significant correlations between variables:

- between variables “Information availability” and “Possibilities to consult”, $r = 0.461$
- between variables “Unexpected changes in law” and “Information availability”, $r = 0.254$.

8. Law Enforcement Mechanism

Four variables were formulated on the basis of specific questions to respondents. All variables are connected with court objectivity and credibility problems. The variable “Objectivity of Courts” was formulated on the basis of the question: “Imagine a private conflict is brought into court with the evidence being very clearly in your favor. Do you have confidence that the assigned judge will enforce the law objectively? Courts can be trusted to enforce the law objectively according to transparent rules: never (1), rarely (2), sometimes (3), frequently (4), mostly (5), or always (6).

Respondents evaluated that this happens in general sometimes, average estimate 3.38 with quite low standard deviation 0.92. 37 respondents (43.5% of respondents) were on the opinion that courts can be trusted to enforce the law objectively sometimes, 24 respondents (28.2%) that frequently, and 12 respondents (14.1%) that rarely. No one respondent trust courts fully, and one respondent do not trust courts objectivity never. We may conclude that in most cases courts are not trusted and economic agents have to use self-enforcement mechanisms in the case of disputes.

Other variables of the law enforcement mechanism were formulated in the same way. There were also interesting correlations between law enforcement variables. For example, strongly were correlated the variables:

- * “Objectivity of courts” and “Knowing the judge personally”, $r = - 0.366$
- * “Power of money” and “Knowing the judge personally”, $r = 0.273$

Significant negative correlation between the variables “Objectivity of courts” and “Knowing the judge personally” can be interpreted so, that if knowing the judge personally will influence the court procedure and result, then it means also less trust against courts decisions objectivity. There is also logical tight positive correlation between the variables “Power of money on the decisions” and “Knowing the judge personally”: if it is advantageous to know the assigned judge personally, it is clear that money can change the result. We may conclude that answers of respondents are in accordance with each other. There were also other interesting correlations between the variables. For example, significantly were correlated variables “Civil servants’ willfulness” and “Unexpected changes in law” ($r = 0.205$); “Civil servants’ power” and “Power of money on the decisions” ($r = 0.318$); “Will to resist and fight back” and “Government’s announcements credibility” ($r = 0.332$), etc. Everyone can interpret these significant correlations, and we may conclude that respondent’s answers are in general in accordance with each other.

9. Uncertainties in Government Agencies Behavior, Law Making Procedures, and Law Enforcement

Respondent’s estimates to uncertainties in government agencies behavior, law making procedures and law enforcement mechanism in Estonia are presented in Table 6.

Table 6. Estimates of Different Uncertainties

	Increased (1)	Remained (2)	Decreased (3)	Average	St. Deviation
1. Uncertainties in dealing with government agencies	33	28	24	1.894	0.817
2. Uncertainties in law making	26	30	29	2.035	0.808
3. Uncertainties in law enforcement	24	34	27	2.035	0.778

All variables about the uncertainties were formulated on the basis of the question: “Do you think that during the last 5 years uncertainties in dealing with government agencies/in law making/in law enforcement have: increased (1), remained about the same (2), or decreased (3)?” In general, all these uncertainties have remained about the same during the last five years. There were mentioned a little improvement of uncertainties in law making procedures (average estimate 2.035, standard deviation 0.808) and in law enforcement mechanisms (average estimate also 2.035, standard deviation a little less, 0.778), but uncertainties in dealing with government agencies have increased a little (average estimate 1.894 with standard deviation 0.817). We may conclude that during the last five years of independence in Estonia various uncertainties in the legal infrastructure are not improved. All these variables of uncertainties were very significantly positively correlated with each other:

* “Uncertainties in dealing with government agencies” and “Uncertainties in law making”, $r = 0.565$

* “Uncertainties in dealing with government agencies” and “Uncertainties in law enforcement”, $r = 0.418$

* “Uncertainties in law making” and “Uncertainties in law enforcement”, $r = 0.660$.

Conclusions

(1) Government regulations do not affect seriously Estonian manufacturing firms operating, expansion or closing down the business decisions. Some more relevant exceptions are large financial cost of firing workers in the case of reducing production (2.35 points) or in the case of closing down the business (2.58 points), and competition with imports (2.69 points), taxes (2.98 points) and getting investment facilities (3.41 points) in the case of the firm expansion desire.

(2) There exists a number of disputes and conflicts between economic agents, but Estonian legislation is not sufficient for resolving these disputes (opinion of 54% of interviewed firms), enforcement mechanism is not well-working (51%), and 65% of firms support the usage of self-enforcement mechanisms. Direct bargaining with the other party was mostly used, quite often disputes were not settled, and firms were not satisfied with the outcome.

(3) The development of the legal and institutional infrastructure is not in the accordance of radical changes on the society and success in the economic development:

- * entrepreneurs and managers have to cope quite frequently with unexpected changes in laws and government economic policies which could seriously affect their business decisions;

- * sometimes entrepreneurs and managers are not informed clearly about new laws and plans to change existing laws and policies, possibilities to voice their concerns indirectly or directly are quite small;

- * the government's announcements credibility was evaluated by responded entrepreneurs and managers as only sometimes happening phenomenon.

(4) Law enforcement mechanism, and especially court system, is operating weakly:

- * entrepreneurs and managers do not trust courts and judges objectivity, and in most cases economic agents have to use self-enforcement mechanisms in the case of various disputes and conflicts;

- * money power on the court decisions plays important role in the court cases, knowing the judge personally could influence the court procedures and outcomes also quite frequently:

- * surprisingly, Estonian entrepreneurs and managers are quite optimistic and they will to fight with unfair court decisions, and in most cases they will to turn to a higher level court.

(5) The degree of civil servants' willfulness and power is quite high; there are some signs of "helping-hand" and "grabbing-hand" model characteristics in Estonian legal and regulatory environment:

- * civil servants can frequently find ways and means to give entrepreneurs and managers a hard time, and sometimes they are able to gain a position of power and to construct a case to blackmail entrepreneurs and managers;

* knowing the civil servant personally will mostly speed up needed procedures, and sometimes this will influence the decisions of civil servants - this phenomenon is dangerous especially in a small society and this generate basis for corruption;

* fortunately, there exists will to resist and fight back by appealing civil servant's superior or to the court.

(6) Uncertainties in dealing with government agencies, uncertainties in law making rules and uncertainties in law enforcement mechanisms are not improved during the last five years and mostly these uncertainties remained about the same level.

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Monetary Policy in a Transitional Economy: Some Open Questions and Experiences

Zeljko Sevic and Aleksandar Sevic

1. Introduction

Monetary policy is comprehended as a series of actions taken by the central bank in order to affect monetary and other financial conditions in pursuit of the broader objective of price stability. But, there is no unique definition of the target of monetary policy. Most of the countries will stress monetary, i.e. price stability while others will chose growth and development, or sustainable growth of real output, high employment and price stability.¹ So, central bank in one country can have one objective of monetary policy, while others are set multiple tasks. It is widely disputed which is better, and whether this dispersion of tasks endanger the monetary policy implementation process, because the central bank can often be extended between two, often contradictory, objectives. Therefore, for a transitional economy probably the best solution is a single task, so that central bank has a clear definition of the objective which has to be achieved. Subsequently with financial system improvement, one can introduce a concept of multiple objectives, because the central bank will be more experienced in monetary policy definition and implementation.

The legislators in CEECs have followed this approach, stipulating that the main duty of the central bank will be preserving internal and foreign monetary stability.² In performing monetary policy the central bank should affect financial markets, i.e. their yields. In this manner monetary policy is transmitted from the instruments of monetary policy to the financial markets, and from the financial markets to the rest of economy. An economy in transition opens a series of new questions and problems, from the instability of money demand to the underdevelopment of sensitive financial markets, etc. Also, these countries inherited some monetary overhang, which they were required to control. In some countries high, or hyperinflation reduced this monetary overhang while in others sound economic, i.e. financial policy eliminated the monetary overhang.

¹ "The objectives of U.S. monetary policy are high employment, stable prices (no inflation), and growth in output on a sustainable basis. These ultimate goals, as they are often described, are not directly under control of the Federal Reserve". (See: FRB of San Francisco (1987); "Monetary Policy in the United States", Federal Reserve Bank of San Francisco, San Francisco, CA, February 1987, p. 6)

² Only in Moldova law is explicitly stipulated (amongst the others) the duty of the National Bank of Moldova to provide loans to the State. (Comp. Art. 4. *Law of the Republic of Moldova on State National Bank of Moldova (National Bank of Moldova), 1991*)

2. Central Bank and Monetary Policy

The central bank has its objective, but it must be more precisely defined in a way that can be realised. So, the central bank must target something more close and feasible to affect, than price stability. It can target: 1) volume of money supply; 2) prices at which gold or foreign currency are convertible into domestic currency³; 3) interest rate variables, such as the minimal market rate or real interest rate and 4) other variables such as the balance of payments, or GDP. The problem with all these targets is that they require precise measurement and a good information set. For instance, real interest rates can be properly measured only if the price expectations of the public is known.⁴ GDP can be measured only with a significant time-lag, and so on. Stability of the structural parameters which underlie monetary policy and their volatility defines what can be used as an intermediate target. Monetary target can be some of monetary aggregates (M0, M1, M2)... However, every country is free to define these monetary aggregates according to its approach, needs, etc. This is completely reasonable since money does not mean only notes and coins in circulation, but also liquid deposits (near money) which can be considered as money. Also, there is the option for a transitional economy, because of information problem and expectations of higher volatility to bind its national currency to a foreign currency establishing a Monetary Board. By the adopted definition in this regime there is no need for intermediate target(s), because the quantity of national currency issued will depend directly on the quantity of foreign currency which the Currency Board has at its disposal.

Usually the target choice is mainly a political question. It is proposed to take into account the possible magnitude of financial and/or real shocks in the economy when deciding on the intermediate target.⁵ In this manner interest rates can be better to target in the case of financial shocks (disturbances affecting money demand), but not in the case of real shocks (discrepancy between interest rates and nominal spending). And, in the transition process, the real interest rate is generally negative, real and financial shocks occurs simultaneously, etc., and therefore it is proposed to have concept of set of targets, and monetary instruments.⁶

3. Set of Monetary Instruments

The central bank pursues monetary policy, using the monetary instruments which can be direct and indirect. Often they can be listed by this criteria but not usually explained. Direct instruments have an aim to act directly on credits approved by the banking sector, while indirect instruments affect the liability side of the bank's balance sheet and in that way indirectly affects the banking sector's overall credit ability. Direct instruments also administratively fix interest rates or the quantity of credit, while indirect instruments perform on financial markets, affecting demand and supply. It should be noted that direct financial

³ Although in some countries foreign exchange determination is left in the hands of the Government. For instance, Yugoslavia (See: Art. 39. and 40. *Law on the National Bank of Yugoslavia, 1993*)

⁴ Interest rate is a main target of the Bank of Finland, but whole institutional framework supports this choice. (See: A. Aaltonen, E. Aunikko and J. Kontulainen (1994): "*Monetary Policy in Finland*", Bank of Finland, Helsinki, esp. p.41)

⁵ C. M. Buch (1995): "*Monetary Policy and the Transformation of the Banking System in Eastern Europe*", Kiel Working Paper No. 676, Kiel Institute of World Economics, Kiel, February 1995, p. 5

⁶ M. S. Khan and V. Sundararajan (1992): "Financial Sector Reform and Monetary Policy", in: V. A. Jaffarey, ed. (1992): "*Structural Adjustment and Macroeconomic Policy Issues*", International Monetary Fund, Washington, D.C., pp. 58-79

instruments affect the balance sheet, i.e. net domestic assets of the commercial banks, while indirect instruments influence the balance sheet of the central bank.⁷

But this, in fact, implies that the central bank can affect the monetary situation in two basic ways, using its regulatory power (authority given by the law), or acting in the financial market as a (principal) player.

Direct instruments of monetary policy are: 1) interest rate control and 2) credit control, while indirect instruments of monetary policy are: 1) reserve requirements; 2) open market operations and 3) central bank lending. Interest rate control can take different forms such as control of lending rates and/or deposit and savings rate control (using regulations, or using a set of administered refinance rates and spreads for the banks). Another direct monetary instrument, credit ceilings are known as a selective credit control where the credit is limited only to certain sectors of the economy. This control can be positive (set an upper limit for the credit) or negative (set a lower limit for selected credits). While positive credit ceilings have prudential considerations, negative credit ceilings have an aim to support a sector which is considered to require it. It is possible to introduce a ceiling which has an aim to be applied to total credits granted by the commercial banking sector. Since this measure is linear each bank faces the same level of restriction.

It is also possible to introduce progressive taxation for exceeding the target "thereby giving the banks the choice between reducing their credit growth, and paying a penalty (tax)".⁸ Competitive banks will choose to pass the limit and pay tax, but anyway they will earn profit. Third, the concept of credit ceilings called net credit ceilings is characteristic of the French and Dutch experiences. In this case the central bank recognises the difference between the extension of credit using long-term papers (effect of the securitization), and crediting by current accounts and their influence on inflation.⁹ There are a few requirements that must be met in order to have effective direct monetary instruments.

In a transitional economy the central bank will opt (and has opted) for direct monetary instruments, because it is easier to implement them, and also evaluation of results is not sophisticated. Also, where financial markets are undeveloped and/or *underperforming* direct instruments are preferable. Further on, in a situation where negative macroeconomic conditions (primarily high inflation) are present these measures are more likely to be effective, because financial flows will be turned out of official channels to unofficial ones. In a situation where the central bank has incomplete knowledge, and experience of the financial market¹⁰, it is likely that the central bank will opt for direct instruments. The image of the central bank is still not developed, so it cannot be reliance on moral suasion, and policy should be as direct as possible, without much explanations.

In this way interest rate control, while than can disturb market forces, is able to limit monetary expansion. Also, it should be noted that banks will report using old-system procedure. Therefore, at the beginning of the transition process it is likely to expect large use of direct monetary instruments. Finally, the experience of CEECs shows that these

⁷ P. L. C. Hilbers (1993): "The Use of Monetary Instruments During the Transition from a Centrally Planned to a Market Economy", Domestic Research Department Series, No. 73, De Nederlandsche Bank, Amsterdam, April 1993, pp. 2-3

⁸ P. L. C. Hilbers (1993), *op. cit.* p. 4

⁹ P. L. C. Hilbers (1989): "The Monetary Cash Reserves Arrangement", in: "The Netherlands Bank Quarterly Review", No. 2, pp. 27-39

¹⁰ See: S. H. Hanke, L. Jonung and K. Schuler (1993): "Russian Currency and Finance: A Currency Board Approach to Reform", Routledge, London, p. 37

projections are right. Only compulsory (obligatory) reserves of indirect instrument were practised relatively widely.

But, in our view, compulsory reserves could be seen also as a monetary instrument in between direct and indirect ones. Compulsory reserves are also administratively enforced, require legal backing, and the central bank must have the authority to sanction disobedient banks.¹¹

It is even noted that with respect to monetary policy instruments, the challenge of transformation lies in switching from quantitative methods (direct instruments) to market operations (indirect instruments).¹² As we previously noted, reserve requirements are a "transitional" instrument between direct and indirect monetary instruments.

Reserve requirements (compulsory/obligatory reserves) require banks to hold an amount of their assets in the form of deposits with the central bank and/or other eligible assets such as cash in vault and often the required amount is related to the bank deposit base.¹³ Also reserve requirements can be defined as a request imposed on banks to keep in its portfolio a certain amount of the central bank money, i.e. to keep some percentage of deposits with the central bank.¹⁴ The central bank can choose to change the rate of compulsory reserves or to change the base on which compulsory reserves should be calculated. It is evident that this measure enforced a series of financial innovations which were undertaken in order to evade payment of the reserves. In a competitive market this could be expensive, especially for the final user of money. A bank tries to shift the costs of this measure (interest non-bearing pay in) to the final user, so an increase in credit interest rates can be expected. Furthermore, the central bank is free to define the base on which compulsory reserves will be calculated. Usually, it is defined as a percentage of the total deposits.

Another indirect instrument is central bank borrowing. If the banking system is in a negative financial position banks could be in a position to draw credits from the central bank. The method of the borrowing from the central bank can take a variety of forms, such as: 1) rediscount of papers by the central bank; 2) borrowing against collateral; 3) refinancing acceptable bank credits and 4) borrowing without requiring any security. The cost and size of central bank lending can be determined by the central bank on the basis of monetary policy considerations and can be rationed by constraining access to it or organising auctions.¹⁵

The central bank must also define its discount rates, and other rates which will be applied, as well as maximum credit limits, maturity and credit terms, etc. Rediscount is simply credit extended to the bank before the date of maturity of securities handed-in on the discount. Also, the central bank must define which securities will be acceptable for the discount. Lombard credits, which, for example, were the favoured borrowing option in the late 1960s in Yugoslavia, after the introduction of the two-tier banking system.

¹¹ See, for instance: J. Osinski and A. Slawinski (1994): "*National Bank of Poland and Open Market Operations*", Paper No. 11, Research Department, National Bank of Poland, Warsaw, September 1994; J. Marnal and S. Adonec (1995): "*Monetary Policy and Liquidity Management in Transition*", mimeo, National Bank of Slovakia, Bratislava, January 1995

¹² T. Rytla (1994): "Monetary Policy in Russia", in: "*Review of Economies in Transition*", No. 10, Bank of Finland, Unit for Eastern European Economies, Helsinki, p. 31

¹³ P. L. C. Hilbers (1993), *op. cit.* p. 7

¹⁴ Z. Sevic (1996): "*Centralna banka: Polozaj - Organizacija - Funkcije*" [Central Bank: Position - Organisation - Functions], Cigoja stampa, Belgrade, pp. 120-124

¹⁵ P. L. C. Hilbers (1993), *op. cit.* p. 9

Open market operations involve the purchase and sale of securities by the central bank in a financial market. Different central banks choose different securities to be the subject of trading. According to the narrow definition, the central bank trades only with the short-term governmental securities and its own treasury bills (T-bills), while upon a second approach the central bank can purchase (and sell) other securities which are sound enough (commercial papers issued by the strong renovated companies, big systems, large commercial banks, etc.). The central bank purchases injects money, i.e. liquidity into financial system, while bank sales reduce the volume of money in circulation.

These actions can take place in secondary markets, where the central bank trades with the governmental securities in order to avoid direct lending to the government; which is always an inflationary move. But, open market operations should always be understood as way of financing the government, where these transactions are solely driven by monetary policy considerations.¹⁶

Indirect measures of monetary policy require also some pre-conditions, such as: 1) it should not be excess reserves, or they should be very limited; 2) interest rates as a target of indirect instruments must fluctuate; 3) credit demand must be sufficiently interest sensitive; 4) competitive character and smooth functioning of the financial markets; 5) financial institution should be sound and 6) a decent level of indirect monetary programming skills should be in place.

A high level of excess reserves can be a significant problem for monetary policy implementation, because in a transitional economy banks are likely to hold excess reserves, especially in a situation where the real sector of economy is not still subject to change. Other issues can be the interest of a small bank to grant credit to a larger one. Interest rate sensitivity and credit demand sensitivity will increase with the development of the financial and banking system. It is of particular importance to develop financial markets, especially - the money market.

In a well-functioning banking system and money market the central bank is in a position to influence the banks' marginal cost of funds, and they steer money market rates, and indirectly the supply and price of bank credit.¹⁷ Credit insensitivity in a transitional economy is the remnant of the former practice known as a "soft budget constraint". Namely, enterprises do not respond properly to the credit variables, simply because they expect governmental subsidies or eventual bail-out from bankruptcy by the government.

The biggest problem of open market operation is the lack of a well-functioning financial market. As it has been already noted with socialism there was no need for a financial market, because of the centralised allocation of all resources. Therefore, in the transition of the financial system, a special segment is devoted to the financial markets (capital and money). They are formally established at the very first phase of the transition, but they require time for development.

The soundness of banking institutions is a very important matter for a transitional economy. Large share of bad debts can create a discrepancy between the market value of an asset and its

¹⁶ P. L. C. Hilbers (1993), *op. cit.* p. 8; Z. Sevic (in: Z. Sevic (1996), *op. cit.*, pp. 141-152) argues that it could be one of the ways of financing the government, but the primary aim is to affect monetary stock, i.e. liquid assets held by the banking sector.

¹⁷ S. Leite and V. Sundararajan (1990): "Issues in Interest Rate Management and Liberalization", in: *IMF Staff Papers*, Vol 37, December 1990, pp. 735-752

book-value. In this case the bank is forced to roll over non-performing loans in order to avoid, at least temporarily - the bankruptcy of clients and, subsequently, themselves.¹⁸ In this direction a reason should be sought for efficient banking supervision enforced by the central bank.

4. Conclusion

In conducting monetary policy the central bank chooses the intermediate target(s) and monetary instruments which will be employed. Cross-country comparisons in CEE shows that banks have similar targets (price (monetary) stability), while intermediate targets differ. Even more important is to notice that over the course of time in some countries the central bank changed their intermediate target(s). Over time central banks opted more for indirect monetary instruments, compulsory reserves and recently open market operations.

The move from direct monetary instruments (credit and interest rate ceilings) means the improvement of entire market structure and the enhancement of market importance. Namely, when the central bank can rely on the market to set the price of financial funds, it means that market forces passed nascent phase and they are strong enough to shape the market and play a role in it. Nevertheless, well-developed and well-performing markets require the active participation of the central bank. The central bank can conduct monetary policy using markets, but also central bank interventions are sometimes necessary to increase overall liquidity within the system.

In the near future, the central bank must develop its *moral suasion* function, i.e. to increase its credibility not only in (financial) markets, but also within the general public. In this way the overall influence of the central bank can be increased and the conduct of monetary policy can be more sophisticated. The central bank bears responsibility not only for monetary policy implementation, but also the soundness of the entire financial system. While performing the latter duty the central bank must not discriminate between banks on the grounds of ownership form, that is it must establish identical access to all licensed (chartered) banks to its facilities.

In the majority of CEECs state-owned banks and recently privatised banks dominate the system. Increased competition should very soon influence narrowing margins and reduce lending rates. But, domestic banks argue that they need governmental support from foreign competition. In our view open entry to foreign banks has had very positive results on market structure, market competition and the overall performance of the banking sector. Again, there is a field in which central bank must act accordingly, in order to make the situation bearable for all participants in the market.

Sound relations between the central bank and banks in order to conduct monetary policy, provides a sound financial system in the country. Until now, a number of positive moves have been made, but there is still a long way to go. As has been noted, transitional economies are finding that the banking reform is a never-ending process.¹⁹ As a result of this, the financial system must be permanently subject to upgrading, elimination of weak points and the introduction of new, improved (well-performing) instruments and participants. The central bank is there to regulate, supervise and when necessary - act as a moderator.

¹⁸ P. L. C. Hilbers (1993), *op. cit.* pp. 10-11

¹⁹ Financial Times (1996): "Czech Finance and Investment", Financial Times Supplement, Friday, April 26. 1996, p. III

The Growth Prospects of Transition Economies Reconsidered¹

Nauro F. Campos

1. Introduction

The group of former centrally planned economies experienced, in 1997, positive growth for the first time since the beginning of the transition process.² On this account, interest in the growth prospects facing these countries has started to mount. A question that summarizes the importance of this research is, for example, how many years would the average transition economy need to reach the income level of the average OECD country? Answering such questions is of obvious policy relevance and the burgeoning literature can not come as a surprise. What does come as a surprise, however, is that the resulting estimates of the long-run growth rates—needed for such “catch-up” simulations—are suspiciously similar, painting an overly optimistic picture and yielding few policy lessons.

These trend rate estimates are similar, we claim, because the literature treats the transition economies as average developing countries. In its simplest form, this misrepresentation can be seen in the mechanics of how these long-run growth rates are calculated. We refer to it as the Barro-Levine-Renelt (hereafter, *BLR*) approach. It proceeds in two steps: (1) coefficients from growth regressions (on large samples of developing countries) are estimated (or taken from specifications allegedly found in Barro, 1991, and/or Levine and Renelt, 1992), and (2) these coefficients are imposed on transition economies’ cross-sectional data. Because the *BLR approach* is omnipresent, the reported long-run growth rates are essentially the same across studies. And because the transition economies are thought of as having much higher stocks of physical and human capital and much lower rates of population growth (compared to the other developing countries), the estimated trend rates tend to be quite high, thus painting an overly optimistic picture.

¹ I am thankful to Randall Filer, Byeongju Jeong, Jeffrey Nugent, Christof Ruhl and Viatcheslav Vinogradov for very useful discussions. Aurelijus Dabušinskas provided alacritous research assistance. The usual disclaimer applies.

² The acceleration of growth in the countries of the Commonwealth of Independent States (CIS) counter-balanced the slowdown in Central and Eastern Europe. The net result for 1997 is that a mere five out of twenty-five countries show negative growth rates. Although these are clearly “good news,” they must be kept in perspective: so far, only Poland has surpassed its initial (1989) level of per capita GDP (EBRD, 1998, IMF, 1998).

Notwithstanding, these are not our main reservations to the existing literature. We are more concerned by its reluctance to generate policy lessons. We believe that examining the growth prospects of any economy can be quite useful if it calls attention to issues that would remain unnoticed because their impact is not observable in a short-run frame. In other words, growth prospects are valuable for the sustainability checks and policy lessons they entail.

Paradoxically, the uniqueness of the transition experience both justifies and entraps such empirical exercises. It justifies them by appealing to the fact that transition is temporary: after a while, the standard set of determinants of long-run economic growth will take over. On the other hand, the uniqueness of the transition experience entraps these exercises because it questions whether and how fast the transition —as well as the remaining command— features will disappear.³

There is, finally, a more mundane justification for this choice of empirical strategy. Because these exercises would require at least annual data since 1989, and these are scanty and of questionable quality, using estimates from other samples appears to be an efficient solution.

However, what if the long-run growth rates of transition economies are determined by a totally different set of factors? Or less stringently, what if some of these determinants become more (or less) important over time? What if their relative importance is different in transition vis-à-vis other developing economies? These are the questions that motivate this paper.

The argument is organized as follows. In the next section, we take stock of the existing literature. Because we do not know of any other attempt to gather and comment on the largest possible number of studies on economic growth in transition economies, the review we present is rather detailed. The main conclusion is that the vast majority of existing studies use the *BLR approach*.

Those in agreement with this conclusion may skip this section and proceed to Section 3, which details the mechanics of the *BLR approach* and discusses its limitations. Section 4 presents the data set we assembled to investigate the economic performance of transition economies since 1990. In Section 5, we re-estimate the various specifications from the literature (the “BLR equations”), but now using data from transition economies themselves.

We find that government expenditures have been positively associated and human capital has been negatively associated with output growth during the transition period. These two results contrast sharply with the assumptions and findings from the *BLR approach*, questioning its might and challenging our understanding of the transition process in its key dimension. Section 6 summarizes our main findings and discusses suggestions for future research.

³ Fisher et al. (1996a) point out that “a useful way to think about the current growth prospects of the transition economies is to consider them subject to two sets of forces: those arising from the transition and transformation process, and the basic neoclassical determinants of growth. The further along a country is in the transition process, the less weight on the factors that determine the transitional growth rate, and the greater the weight on the standard determinants of growth” (p. 231). These conceptual challenges, the transition raises, are beyond the scope of this paper.

2. Growth in Transition

The objective of this section is to review the empirical literature on economic growth in transition economies. The emphasis is on cross-country studies and it is justified on the basis that this approach is the relevant source of stylized facts, which should ultimately inform the theoretical literature.⁴ We divide the empirical literature in two branches: one that stresses the effects of reforms on growth, and the other that emphasizes the growth prospects facing these economies.

We should ask, at the outset, what caused the abrupt breakdown of the socialist system. Despite being an obviously daunting task, Stiglitz suggests that technological change is at the very heart of this collapse.⁵ Succinctly put, before 1989 inefficiencies abounded. Not only physical capital was over-accumulated, but this also seems to have happened regarding every other input: energy, materials, labor, and even human capital. This heritage of large and widespread inefficiencies is one of the unique features of transition economies.

Another, related, possibility for the doom of socialism is that of within block heterogeneity. When growth researchers look up “convergence hypothesis” in the *New Palgrave* (Wiles, 1987) they may be puzzled by the absence of references to such key words as conditional and unconditional, beta and sigma. Instead, they find the convergence entry to be about the expectation that standards of living among members of the ex-communist block would first converge to a common level, and surpass those of the most advanced capitalist economies. In a breakthrough paper, Estrin and Urga (1997) convincingly show that none of these “two convergences” took place between 1970 and 1990. Moreover, when they extend the analysis to 1995 they find that “reforms are not yet leading these economies to reverse their long standing economic decline relative to the West” (1997, p. 23). Estrin and Urga are not alone studying the consequences of economic reforms for macroeconomic performance. If one insists, as we do here, on cross-country empirical analyses of economic growth in transition economies, the list should include Åslund, Boone and Johnson (1996), De Melo, Denizer and Gelb (1996), De Melo and Gelb (1997), Fisher, Sahay and Vegh (1996a, 1996b), and Heybey and Murrell (1997). All these papers discuss growth performance since 1989, but none of them attempt to quantify growth prospects.

De Melo, Denizer and Gelb (1996) and De Melo and Gelb (1997) map the output decline, construct an index of the extent of liberalization and offer evidence that cumulative liberalization is positively correlated with output growth. Because this liberalization index is used widely, we should note two of its distinguishing features. First, the index is based on the controversial notion that what accounts for the disparity in economic performance during transition are government policies (1997, pp. 62-63). Second, the index is a weighted-average of three components: liberalization of internal markets, of external markets and of private sector entry (weights are 0.3, 0.3 and 0.4 respectively).

Fisher, Sahay and Vegh (1996a) use this liberalization index in a panel of 20 transition countries (for 1992-1994). They find that growth is positively and statistically

⁴ The theoretical literature is not reviewed here. It mostly focuses on the output fall, and recent contributions include, among others, Blanchard (1997), Brenton, Gros, and Vandille (1997) and Roland and Verdier (1997).

⁵ He notes that “It is these changes [that modern technology has taken, from computer-driven manufacturing to genetic engineering], in the end, that doomed socialism” (Stiglitz, 1994, p. 205).

significantly associated with fiscal surpluses, foreign aid, and the extent of liberalization, and is negatively and significantly associated with inflation. In subsequent work (1996b), the authors increase the number of countries (from 20 to 25, for 1992-1994) to conclude that growth is negatively and significantly associated with initial income, and positively and significantly associated with the choice of exchange rates regimes, fiscal surpluses, and the (cumulative) liberalization index.

Åslund, Boone and Johnson (1996) offer some important new results. In particular, they find conclusions change dramatically when considering output change between 1989 and 1995 instead of output level at the end of the period (1995). For the first case, they report that once dummy variables for countries in the ruble zone and war-torn are included, “there is no robust significant correlation between output change and any measure of reform” (1996, p. 233). However, when they turn their attention to output level in 1995, the extent of liberalization and inflation are found to be statistically significant and have their expected signs.

The last contribution we should mention that investigates growth during transition, without discussing growth prospects, is that of Heybey and Murrell (1997). These authors identify a set of problems in the existing literature, notably with respect to the measurement of the speed of reform and the issue of simultaneity. Using simultaneous equations methods they conclude that initial conditions are “much more important than policy variables in determining growth performance” (1997, p. 15).

We now turn to studies that, in addition to an understanding of the growth process during the transition period, are also concerned with prospects. Because of the impracticable number of individual country studies, in what follows we focus on multi-country studies, in particular, ones that pay attention not only to Central and Eastern Europe, but also to the Baltic and the CIS countries.⁶

The first systematic analysis of growth prospects of transition economies, to the best of our knowledge, appeared in the *World Economic Outlook* (IMF, 1996), the chapter entitled “Long-Term Growth Potential in the Countries in Transition”. It uses the *BLR* approach to simulate the effects of simultaneously lowering the share of public expenditure (except on education) to 15 percent of GDP and raising investment rates to 30 percent of GDP. Not surprisingly, it finds that this 50 percent increase (over its current 1995 level) in investment would increase growth substantially. However, no explanation is given to how these investment rates can be raised (or why those expenditure levels should be lowered). Although this report does not derive policy lessons explicitly from this exercise, it does discuss three policy areas (namely fiscal policy, capital flows and financial system) that reflect the main challenges the IMF perceives to sustainable growth in the region.

⁶ Many excellent studies do not fit in this criterion. Borenstein and Montiel (1992) and Sachs and Warner (1996) both examine only three transition countries. The former uses the Mankiw-Romer-Weil framework to identify long term growth paths, while the latter uses three countries' experience to argue that harmonizing with the European Union policy standards will result in lower growth rates than following the policies of the group of “very fast growing developing economies.” One of the most careful, and less cited, of the studies excluded here is Barbone and Zalduendo (1997). They modify the *BLR approach* in that they estimate their own theoretical model for a large sample of developing countries and then use the coefficients to discuss accession to the European Union of five Central and Eastern European countries. Finally, we should mention the article by Leamer and Taylor (1994), a careful and original contribution that concludes with a number of hypothetical, although highly relevant scenarios (but no estimates of growth rates for individual countries).

Havlik (1996) bypasses the *BLR* approach by just assuming a growth rate differential in real per capita GDP of 3 percent between the CEEC-7⁷ and the European Union averages. The question he poses is, given the 1995 actual levels of real per capita GDP, how many years it will require to the CEEC-7 countries to catch-up with the EU or, more likely, with its poorer members? He concludes, “convergence between the two most advanced CEEC countries and Spain (...) could not happen before 2005. For the other CEEC members to converge to the EU average by 2010 would require a growth differential of more than 5 per cent, a highly unrealistic assumption” (1996, pp.42-44). The simple arithmetic highlights the distance between the two groups of countries in a rather dramatic way.

Denizer (1997) stresses the role of initial conditions and in doing so provides a finer depiction of the determinants of the various “transition patterns” identified in De Melo, Denizer and Gelb (1996). He finds that initial conditions matter, as proxied by distance (in miles) from Vienna and whether the country was independent before socialism. He also departs slightly from the *BLR* approach in that he only uses the Levine-Renelt specification on the basis that it “includes variables that are shown to be robust in various specifications of the growth equation” (1997, p. 13). In addition, Denizer extends previous analyses by considering a broader sample of transition economies (adding Mongolia, China and Vietnam). Finally, as a simulation exercise, he evaluates the impact of raising the investment rate to 30 percent, from its current levels, on the number of years these economies will need to reach current OECD income levels.

One important contribution to this literature is made in the European Bank for Reconstruction and Development’s *Transition Report 1997* (EBRD, 1997, chapter 6). This Report contrasts the findings on the growth prospects of transition economies that originate from the Levine-Renelt specification with those from an alternative that includes, *inter alia*, an index of institutional development.⁸ This comparison suggests a downward revision of the forecasted long-run growth rates: even for those transition economies with relatively high-quality institutions (and for which, institutional data is available), the absence of further institutional change should lower long-term growth rates by 1.5 percentage points.

Fisher, Sahay and Vegh (1997) use coefficients from Barro and from Levine and Renelt, plug-in cross-sectional (for 1994) data from 15 transition economies and calculate the forecasted GDP and per capita GDP growth rates. They also conduct two simulation exercises. The first uses the Barro coefficients to investigate the consequences (in terms of the number of years needed to reach current OECD income levels) of lowering government consumption from current levels to 10 percent. The second simulation uses the Levine and Renelt specification to look at the impact on growth of raising the investment rate to 30 percent, from current levels.

Fisher, Sahay and Vegh (1998) again use the *BLR* approach but focus on a smaller sample of transition countries to assess their catching-up prospects with the European Union.⁹ They carry out two simulation exercises to estimate the number of years it will be needed

⁷ CEEC-7 encompasses Hungary, Czech Republic, Poland, Slovak Republic, Slovenia, Bulgaria and Romania.

⁸ This is a composite index encompassing “expropriation risk”, “rule of law”, “risk of contract repudiation by the government”, “corruption”, and “quality of the bureaucracy” (EBRD, 1997, p. 106). The enlarged Levine-Renelt specification includes enrollment rates in primary school, changes in international prices, and growth of labor force (instead of population).

⁹ Their sample of 13 transition economies is formed by Hungary, Czech Republic, Poland, Slovak Republic, Slovenia, Croatia, Latvia, Lithuania, Albania, Estonia, Macedonia, Bulgaria, and Romania.

to these transition economies to converge to the income levels of the three “low-income EU countries” —Greece, Portugal and Spain— assuming that the latter will grow at 2 per cent per annum. The first simulation exercise uses the Barro specification to investigate the consequences of lowering government consumption from current levels to 10 percent. The second uses the Levine and Renelt specification to look at the impact on growth of raising the investment rate to 30 percent, from its current levels. One innovation this paper brings is the calculation of income losses during the socialist period: using 1937 data for 6 countries, they estimate that approximately two-thirds of GDP per capita were lost during the socialist experiment.

Summing up, the vast majority of the empirical studies on economic growth in transition economies use the *BLR approach*. Therefore, time is ripe for a more detailed discussion of this approach, to which we turn to in the next section.

3. Back to the BLR

The *BLR approach* consists of two steps. First, the coefficients from growth regressions on large samples of developing countries are estimated or, more often, “borrowed” from Barro (1991) and/or Levine and Renelt (1992). Second, these coefficients are “imposed” on transition economies’ cross-sectional data. We should clarify what we mean by “imposed”: cross-sectional data for a set of transition economies are collected (often for 1994, with the 1989 PPP per capita level as initial income) and these values, for each country, are multiplied by their respective coefficients and summed to the constant term. The result is the estimated long-run growth rate. Because the *BLR approach* is ubiquitous, these rates are essentially the same throughout the literature and they are quite large, with an average of 4.32 percent, and ranging from 1.8 percent (Bulgaria) to 11.57 percent (Turkmenistan). A glimpse through the *BLR* equations may suggest why this is so.

The Barro (1991) specification, used in the papers reviewed in the last section, is as follows:

$$GDPGROWTH = 0.0302 - 0.0075 * Y0 + 0.025 * PRIM + 0.0305 * SEC - 0.119 * GOV,$$

while the Levine and Renelt (1992) specification is:

$$GDPGROWTH = -0.83 - 0.35 * Y0 - 0.38 * POP + 3.17 * SEC + 17.5 * INV,$$

where *GDPGROWTH* is per capita real GDP growth, *Y0* is the initial level of per capita income, *PRIM* is the gross primary school enrollment rate, *SEC* is the gross secondary school enrollment rate, *POP* is the rate of population growth, *GOV* is the share of government consumption in GDP, and *INV* is the share of investment in GDP.

The reasons why the reported long-run economic growth rate estimates are so large should now be clear. Transition economies are often thought of as having much higher primary and, especially, secondary school enrollment rates, much lower rates of population and labor force growth, and higher investment rates, than other developing countries. Each of these biases the estimated long-run growth rates upwards.

Yet, there are some important additional problems with these *BLR* exercises. What the literature just reviewed calls the “Barro specification” can simply *not* be found in Barro’s 1991 paper. There is, surprisingly, one specification that contains the same coefficients shown above (equation 1 in Table 1, pp. 410-11), but this specification contains three additional variables!¹⁰ Despite the fact that the “Levine and Renelt specification” *is* found in their 1992 paper, this specification does not solely includes variables that Levine and Renelt find to be robust in explaining growth. As a matter of fact, a cursory reading of their table 1 (p. 947), shows that they find that population growth is *not* a robust growth determinant.

Finally, the confidence in the *BLR* long-term growth rates estimates seems to come from the belief that recent research has been able to identify a robust set of growth determinants.¹¹ This set is assumed to be robust in two ways: first, in the sense that the vector of factors explaining the growth performance of, say, Zambia between 1960 and 1990 is the same that explains the growth performance of, say, Hungary from 1998 onwards.¹² Second, this set of growth determinants is assumed to be robust in the sense that the relative importance of different elements of this vector is expected to remain constant across countries as well as over time. To shed light on these assumptions, we assembled the data set we present in the next section.

4. My Data Set

The data set constructed for this paper contains all the variables in the two equations underlying the *BLR approach*.¹³ The original plan was to assemble a panel, extending from 1990 to 1997, and covering as many transition countries as possible.¹⁴ Data availability prevented us of doing so: Yugoslavia and Bosnia-Herzegovina have to be excluded, and many observations are missing for the earlier as well as most recent years. Table 1 gives the basic statistics, sources, coverage, and number of missing observations per series (with 25 countries and eight years, the maximum number of observations is 200). Table 2 shows the list of countries in our sample.

Before examining the individual series, we must raise the usual caveat about data quality and comparability. These problems are well known and have been discussed at length in Bartholdy (1997). Since our focus is on inter-country comparisons, we made the costly decision (because it increases the number of missing observations) not to use national sources, in the belief that effort has been put in ensuring comparability by the international agencies responsible for the collection and publication of these data.

¹⁰ Namely, the number of revolutions and coups, the number of assassinations per capita, and the deviation of the 1960 PPP value for the investment deflator from the sample mean.

¹¹ Ghosh and Wolf note that “the empirical growth literature now arguably suffers from an embarrassment of riches” (1998, p. 3). Durlauf and Quah summarize this literature and find that “in addition to the four variables suggested by the augmented Solow-Swan model (initial income and the rates of human capital investment, physical capital investment, and population growth), [different studies have used a total of] 36 different categories of variables and 87 specific examples” (1998, 45).

¹² The choice of Zambia is purposeful. Its exclusion apparently changes Barbone and Zaldueno’s results (1996) on the paths to accession to the European Union of five Central and Eastern European countries.

¹³ Namely, initial level of per capita income (PPP), real per capita GDP growth rates, gross domestic investment (as a share of GDP), gross enrollment ratios in primary and secondary school, and general government expenditures and consumption (as a share of GDP).

¹⁴ We excluded at the outset China, Vietnam and Mongolia, because we deem their transition processes to be radically different.

It is only appropriate to start with the initial level of per capita GNP, that for the year 1989 (figures are in 1987 US\$, PPP). The series is shown in the first column of Table 2 and is taken from De Melo, Denizer, Gelb, and Tenev (1997). In 1989, most transition economies were classified as upper-middle income economies.¹⁵ Because of the stark differences in economic performance since, in 1997 these economies are found widely spread over the rank of countries (by their level of development).

The consequences can be better appreciated when we name the “new neighbors” of the transition economies.¹⁶ Among transition countries, Tajikistan has the lowest GNP per capita in 1995 (followed by Georgia and Azerbaijan, respectively), while Slovenia has the highest (followed by Hungary and the Czech Republic, respectively). The country immediately below Tajikistan, in per capita GNP, is Gambia and the one immediately above is the Central African Republic. The country immediately below Georgia is Angola, while the one immediately above is Pakistan.

The “median” transition economy is Romania, neighbored by the Dominican Republic (below) and Jamaica (above). At the other extreme, the country immediately above Slovenia is Greece, and the one immediately below is Argentina. Hungary is “surrounded” by Chile and Malaysia, while the Czech Republic is ranked between Malaysia and Trinidad and Tobago. The dispersion in the transition group has increased substantially since 1989 and this list of countries in close positions is to dramatize this change, in that it was definitely not all for the best.

Dispersion increased because of the very different economic performances, obviously. Table 2 shows annual GDP growth rates from the *EBRD Transition Report Update 1998*. A few remarks are in order. First, the countries of Eastern Europe experienced output falls that turned out to be much smaller than the ones observed, at a *later* date, among the CIS economies.

Second, there is the Baltic paradox: although Estonia, Latvia and Lithuania all had output contractions comparable to other CIS countries, their recovery was and has been much faster and pronounced. And finally, as it can be seen from the last column, so far (1997), only Poland has clearly surpassed its initial level of per capita GDP.

What can explain these different performances? We expect that at least part of the answer is found in the variables underlying the *BLR approach*, namely investment rates, population growth, enrollment ratios, and government expenditures. Notice that these variables do not fully or directly capture policy differences or initial conditions, at least not as commonly understood in the literature reviewed above.¹⁷ On the other hand, they

¹⁵ The World Bank ranks countries by their level of economic development, using as criterion GNP per capita (exchange rates conversion). “The GNP per capita cutoff levels (...) are as follows: low-income: \$765 or less in 1995 (forty-nine economies); middle-income: \$766 to \$9,385 (fifty-eight economies); and high-income: \$9,386 or more (twenty-six economies). A further division, at GNP per capita \$3,035, is made between lower-middle income and upper-middle income” (World Bank, *1997 World Development Report*, p. 207).

¹⁶ The source is the *1997 World Development Report*. This is the latest complete rank we know of. A slightly different ordering of developing and transition countries entails if conversion is based on PPP, instead of exchange rates. One reason is the magnitude of the remaining distortions in the transition economies’ non-tradables sector.

¹⁷ Blanchard (1997) puts forward a set of “stylized facts” based on the evolution of aggregate output and its composition, of productivity and (un) employment, and investment. He also downplays the role of policies and initial conditions. Our analysis differs in that: (a) output per capita is taken as an indication of the country’s level of development, (b) attention is restricted to population growth, thus avoiding the many important unemployment issues, (c) we investigate the quality of labor (human capital) as well as (d) the role of government expenditures.

are informative with respect to the sustainability aspects, or the long-run prospects these economies face, our main interest in this paper.

We begin by studying investment rates, measured by gross domestic fixed investment as a percentage of GDP.¹⁸ From Figure 1, notice first that the Balkans have much lower investment rates than our other four groups.¹⁹ They have also been joined, more recently (1995), by the countries of the ASIA group. There are two additional observations worth making. First, it is only in the Baltic countries and in the countries of the ASIA group where these rates declined sharply in the early 1990s (thus feeding into the Baltic paradox mentioned above). Second, only for the Visegrad and Balkan countries there is thus far a clear upward trend (after 1993-94).

These investment rates range from 14 to 28 percent of GDP, and for 1996 three out of our five groups have averages above 20 percent.²⁰ The often heard concern about these figures being too low is echoed here (and particularly so regarding the Balkan countries and those in the ASIA group). In 1995, the same rates for low-income economies averaged 30 percent, for lower-middle economies they averaged 25 percent, for upper-middle economies they averaged 21 percent, and for the high-income economies they averaged 20 percent.²¹ Given the current development level of most transition economies, these rates are low indeed.

Because it is included in the *BLR equations*, we also collected data on population growth. However, the theoretically correct variable in this case is work hours, or less stringently, the actual labor force. Across transition economies there are sizable differences (e.g., in participation rates) that are not taken into account in the variable we use.

Table 3 shows the rates of population growth in our sample. The conventional wisdom, that these economies have quite low rates of population growth, is vastly confirmed. The average annual population growth rate (1990-1996) across transition economies is 0.21 percent.²²

This average for low-income economies in 1990-1995 is between 1.7 and 2.4 percent, for lower middle-income economies is 1.4, for upper middle-income economies is 1.7, and for high-income economies is 0.7 percent.²³ Although average population growth is indeed low, there are some interesting exceptions: Turkmenistan, Uzbekistan, and Tajikistan — basically Islamic countries and agricultural economies— all show average

¹⁸ Gross domestic fixed investment comprises all outlays (purchases and own-account production) on additions of new and imported durable goods to the stocks of fixed assets, less the proceeds of net sales (sales less purchases) of similar secondhand and scrapped goods. Outlays by general government on durable goods primarily for military purposes are excluded. According to the UN System of National Accounts, these outlays are treated as current consumption and classified under government consumption.

¹⁹ For simplicity, we divided our sample in five groups. The transition countries in Asia (ASIA in the Figures' legend) are Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The BALKAN countries are Albania, Bulgaria, Croatia, Macedonia, Moldova and Romania. The BALTIC countries are Estonia, Latvia and Lithuania. The group called BUR comprises Belarus, Ukraine and Russia. The VISEGRAD countries are the Czech Republic, Hungary, Poland, Slovakia and Slovenia.

²⁰ These figures, however, do not reveal anything about the underlying private-public composition. We believe this to be a crucial issue during the transition process but, due to data unavailability, it is left for future work.

²¹ Source is World Bank, *1997 World Development Report*, Table 13, pp. 238-239.

²² These low rates also reflect the demographic situation in the transition economies, where the increasing dependency ratios have negative fiscal consequences. For a discussion, see Coricelli (1997).

²³ Source is World Bank, *1997 World Development Report*, Table 4, pp. 220-221.

annual population growth rates well above 2 percent (Armenia follows with a 1.29 percent average).

Let us turn to the human capital data. Although years of schooling would clearly be the appropriate measure, it is not available for most countries. In addition, the proxy for human capital in the *BLR approach* is the gross enrollment ratio.²⁴

Examining these ratios, in Figure 2,²⁵ reveals a discomfiting trend: gross secondary school enrollment ratios not only show considerable variation, but also in many countries seem to have *declined* since 1990. In particular, the *range* of ratios went down by five percentage points in five years, from 75-95 to 70-90. However, notice that the only one group showing decline throughout is ASIA (where all countries are from the CIS). Although these latter figures are still high by international standards,²⁶ such a contraction is unheard of.

One possible reason would be that an over-accumulation of human capital took place under communism, paralleling that of physical capital. Indirect evidence for such is found among the inputs of the “education production function”: under communism, relative teacher’s salaries declined since the early 1960s, and repetition rates were virtually zero for as long as there are data.²⁷

The last variable underlying the *BLR approach* is the share of government consumption in GDP.²⁸ The study of the effects of government size on economic growth is highly controversial, to say the least, and consensus is being built upon the notion that different types of expenditures have different effects on economic growth. In the *BLR approach*, in the “Barro specification” in particular, this dimension enters with a negative sign, indicating that larger governments are associated with slower rates of economic growth. Figure 3 shows the evolution of government consumption in transition economies between 1990 and 1996.

There seems to be no clear trends, with one exception: in the Baltic countries, government consumption as a share of GDP is *increasing* throughout the period, reinforcing the “Baltic paradox” highlighted above. It should also be noted that, these levels of government consumption are high in comparative perspective (except for the ASIA countries). In 1995, government consumption in low-income economies averaged 13 percent of GDP, in lower-middle income countries it averaged 14 percent, in upper-middle income countries 15 percent, and in high-income countries it averaged 15 percent of GDP.²⁹

²⁴ Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education at hand. Primary level provides the basic elements of education at elementary or primary school, while secondary provides general or specialized instruction at middle, secondary, or high schools, teacher training schools, vocational or technical schools. The latter is based on at least four years of instruction at the first level (source is mostly UNESCO.)

²⁵ See footnote 18.

²⁶ The 1997 *World Development Report* reports that, in 1993, this ratio for middle-income economies was 63, and 97 for high-income economies (Table 7, pp. 226-227).

²⁷ For a more detailed discussion of these issues see Campos (1998).

²⁸ Because coverage is less than satisfactory, we decided also to collect data on general government expenditures (which *inter alia* includes capital expenditures, interest payments and social expenditures).

²⁹ Source is World Bank, 1997 *World Development Report*, Table 13, pp. 238-239.

In sum, the vast majority of the countries in our sample would be classified as “upper-middle income” economies in 1989, while today a mere four would in this category,³⁰ and none as a high-income economy. The large output falls are to blame, although they were smaller and occurred earlier in Eastern Europe than in the CIS countries. Our examination of the variables underlying the *BLR approach* makes the term “transition” somehow euphemistic as few of these show clear-cut trends. Investment is low, in comparative perspective, but show no visible trend. Population growth rates are also low and apparently trendless. Government consumption is high, given the level of development of the countries in our sample, but again we could not distinguish trends. Indeed, the one trend we identify is regarding gross secondary enrollment ratios, yet these are found to be *decreasing* throughout the transition period. On a more positive note, we find evidence of a “Baltic paradox”: Estonia, Latvia and Lithuania all had output contractions comparable to other CIS countries, but their recovery has been much faster and pronounced. When we turn to our set of variables for explanations, the paradox is augmented. In the Baltics, investment rates decline dramatically in the early 1990s (*vis-à-vis* the other transition economies), and this is the only group for which the share of government consumption in GDP is rising throughout the transition period. The overall inconclusiveness of our results cast some heavy doubts on the optimistic predictions emanating from the BLR approach. In the next section, we proceed in our search for a set of stylized facts that can be useful in informing theory, by re-estimating the *BLR equations*, and exploiting our data set in its cross-sectional and panel dimensions.

5. Back to the Future

The main objective of this section is to estimate the equations underlying the *BLR approach* using the data set presented in the last section. Three warnings should be kept in mind. The first is that it is indeed frustrating that we were not able to put together a data set that is *clearly* (though we are convinced it is marginally) superior to the ones used in the studies discussed in Section 2. The number of missing observations for 1996 and 1997 assures that our results will have to be revised much sooner than what was originally envisaged. The second is a related caveat. The results that follow do not seem extremely robust: the exclusion of certain countries in some runs, or the inclusion of some variables in certain specifications, alters the statistical significance levels of many coefficients. Therefore, we found it important to report in addition to the “original BLR equations,” results for a number of stripped as well as enlarged versions of these equations to allow the reader some latitude in judgement. Third, and finally, there is no pretension here that the results below are any more couched in a theoretical framework than the ones from studies based on the *BLR approach*. Nevertheless, an effort is made to relate them to standard growth frameworks.

We start by exploring the cross-sectional dimension of our data set, for the case of the “Barro specification” (Table 4a). Reading the table from top to bottom, the reader can easily notice the absence of statistically significant coefficients, until the bold lines (that distinguishes the complete Barro’s specification). This is rather surprising because, after all, these variables have been identified as long-run (growth) determinants and one would expect that they would play a role, at least in a cross-sectional frame.

³⁰ These are Slovenia, Hungary, Czech Republic, and Croatia.

Looking at the individual columns (variables), notice that the sign of the initial income coefficient is positive (although not statistically significant) in five out of six equations. Also worth mentioning is that it is only after we include a CIS dummy variable (which assumes the value of 1 for CIS countries, and zero otherwise) that the sign on initial income turns negative (although the coefficient is never statistically significant). This result is in clear contrast with theory and with the findings from the studies reviewed in Section 2. Convergence seems to be conditional, but upon CIS membership.

In our view, the most important result from Table 4a is that the coefficient on government expenditures is found to be statistically significant, and positive (instead of negative as in Barro's original specification). This result is robust to the introduction of the CIS dummy variable, a step known to quiver most of the results in the literature.

Table 4b shows our results for the cross-sectional dimension of the "Levine and Renelt specification." Once again, the lines in bold contain the original equation, the ones above subtract from it, while the ones below add. The lack of statistically significant coefficients is obvious: the only one is that on the CIS dummy, in the very last row. Notice also that the coefficient on enrollment in secondary school is negative (although not statistically significant). Another somewhat surprising result is that the coefficient on investment is never statistically significant (although it is positive throughout).

We now turn to the panel dimension of our data set for the case of the "Barro specification" (Table 5a). The first important result to note is that the coefficient on initial income is always positive and (in two equations) statistically significant. Moreover, if instead of government consumption we use government expenditures, the coefficient on secondary school enrollment ratios becomes statistically significant, and negative. The conjunction of these last two results support Chu and Schwartz's recommendation that "increases in the share of government expenditures on capital—human and physical—are needed to improve log-run output potential" (1994).

In this sequence, controlling for the CIS countries generates huge "benefits": it removes the statistical significance from two unexpected results, namely from the positive effect of initial income and from the negative effect of education. In our view, this qualifies the possibility of existence of problems surrounding human capital accumulation in transition economies, in that these would be truly severe only in the CIS countries.

Finally, Table 5b shows our results for the panel dimension of the "Levine and Renelt specification." There are three unexpected results. First, the coefficient on initial income is positive and statistically significant until the inclusion of the CIS dummy. Second, although the coefficient on population growth is just positive in three of the four equations, it is also statistically significant after we include the CIS dummy. Third, and finally, although they are never statistically significant, the coefficients on investment and education are negative throughout.

In sum, we opened this section with some cautioning words about robustness. With them in mind, there are two findings that we strongly suspect will remain in subsequent analyses and, in case they do, could open new areas of research. One is that government expenditures as a share of GDP has been positively associated with economic growth in transition economies, and the other is that education has been negatively associated. In

addition, the relative robustness of these two results questions the validity of the *BLR approach* to the experience of the transition economies, even in its cross-sectional dimension. Although the set of determinants still may be appropriate, their relative importance and role should be carefully re-examined.

6. Concluding Remarks

The objective of this paper was to discuss economic growth in transition economies, with emphasis on its sustainability aspects. We critically surveyed the empirical literature and pointed out areas we think deserve attention. Despite focusing on the limitations of the *BLR approach*, we find that these seem far to circumscribed to growth prospects studies. We also discussed the data set assembled for this paper and re-estimated the various specifications from the literature, but now using data from transition economies themselves.

Our comparative analysis revealed the existence of a “Baltic paradox.” Although it was clearly beyond our scope to explore it further, we like to think we characterize it as fully as our data set allowed. We are convinced that there are important lessons waiting there, in particular with respect to the role of fiscal policy during the transition period. The type of questions we have in mind to shed some light on this paradox is, for instance, “were the Baltics able to take-off because government invested in, say, needed infrastructure early on?”

The major finding of this paper is that overall government expenditures have been positively associated and human capital has been negatively associated with output growth during the transition period. Surprisingly, however, the former can be best seen in the cross-sectional dimension of our data set, while the latter in its panel dimension. These two results deeply challenge our understanding of the transition process in its very key dimension.

There are mainly two research directions we would like to pursue. First, it was clear since the beginning that the results would lose considerably strength without the benefit of a supporting theoretical framework. One quite natural extension would be to estimate a stochastic version of the Solow model as elaborated, for instance, in Cellini (1997). Another possibility, opened by the comparative development perspective, would be to assess how the Lewis model, the fulcrum of all development economics, would fare facing the transition experience. A third and last example of a guiding theoretical approach would be to incorporate political economy factors (as in Rodrik, 1995). These are suggestions that serve only one purpose: to emphasize the point that the main needed research is the one that bridges theoretical and empirical analyses of the transition experience. It is not only the case that theory is still in search of a set of stylized facts, it is also true that thus far there are no empirical study on growth in transition economies where this bridge can be found.

On the empirical front, we think three areas should be pursued to reinforce and complement our results. First, growth accounting exercises would be of great use as shown, for example, in De Broeck and Kostial (1998). Second, providing a proper understanding of the role of fiscal policy in the transition process, as well as of the contours and severity of the human capital problem in the different groups of transition

economies seems imperative. And third, and finally, empirical studies should start attempting to incorporate institutional variables (as in Adelman and Vujovic, 1998).

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Table 1. Basic Statistics, Sources, and Coverage

<i>Variable name</i>	<i>Period*</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Minimum</i>	<i>Maximum</i>	<i>No.</i>	<i>Source (s)</i>
GNP per capita PPP, US\$	1989	5593	2074.3	1400	9200	0	De Melo, Denizer, Gelb, and Tenev, (1997)
GDP per capita, PPP, US\$	1992-1996	3846.2	2292.9	920	10954	24	EBRD (1997)
GDP growth, annual, %	1990-1997	-5.4	10.4	-52.6	10.5	0	EBRD (1997, 1998)
Gross primary school enrollment	1990-1995	94.8	9.1	76	118	69	UNESCO (1997)
Gross secondary school enrollment	1990-1995	80.8	12.9	35	102	59	UNESCO (1997)
Gross fixed investment, % GDP	1990-1996	18.9	6.5	4	36.6	38	EBRD(1995,1997,1998), World Bank[WDI,WDR]
Population growth, annual, %	1990-1996	0.3	1.2	-2.1	7.2	40	World Bank [1995, 1996, WDR, WDI]

Government expenditure, % GDP	1990-1997	39.2	12.1	7.3	65.9	25	EBRD Transition Report, 1997, Update
Government consumption, % GDP	1990-1996	17.6	5.6	5.9	32.9	41	World Bank [WDR, WDI]

*Period ranges vary with countries

	1989 PPP level	1990	1991	1992	1993	1994	1995	1996	1997	Estimated level of real GDP in 1997 (1989=100)
Albania	1400	-10.0	-27.7	-7.2	9.6	9.4	8.9	9.1	-8.0	79
Bulgaria	5000	-9.1	-11.7	-7.3	-1.5	1.8	2.1	-10.9	-7.4	63
Croatia	6171	-6.9	-20.6	-11.7	-0.9	0.6	1.7	4.3	5.5	73
Czech Republic	8600	-1.2	-11.5	-3.3	0.6	3.2	6.4	3.9	1.0	98
Estonia	8900	-8.1	-7.9	-14.2	-8.5	-1.8	4.3	4.0	10.0	78
Macedonia	3394	-9.9	-12.1	-21.1	-8.4	-4.0	-1.4	1.1	1.0	55
Hungary	6810	-3.5	-11.9	-3.1	-0.6	2.9	1.5	1.3	4.3	90
Latvia	8590	2.9	-10.4	-34.9	-14.9	0.6	-0.8	2.8	6.0	56
Lithuania	6430	-5.0	-13.4	-37.7	-17.1	-11.3	2.3	5.1	5.7	43
Poland	5150	-11.6	-7.0	2.6	3.8	5.2	7.0	6.1	6.9	112
Romania	3470	-5.6	-12.9	-8.7	1.5	3.9	7.1	4.1	-6.6	82
Slovakia	7600	-2.5	-14.6	-6.5	-3.7	4.9	6.8	6.9	6.5	96
Slovenia	9200	-4.7	-8.9	-5.5	2.8	5.3	4.1	3.1	3.3	98
Eastern Europe and Baltic States				-4.1	0.7	3.5	5.3	4.2	3.5	95
Armenia	5530	-7.4	-17.1	-52.6	-14.8	5.4	6.9	5.8	3.3	38
Azerbaijan	4620	-11.7	-0.7	-22.6	-23.1	-18.1	-11.0	1.3	5.0	40
Belarus	7010	-3.0	-1.2	-9.6	-7.6	-12.6	-10.4	2.6	10.0	71
Georgia	5590	-12.4	-20.6	-44.8	-25.4	-11.4	2.4	10.5	10.0	32
Kazakhstan	5130	-0.4	-13.0	-2.9	-10.4	-17.8	-8.9	1.1	1.8	58
Kyrgyzstan	3180	3.0	-5.0	-19.0	-16.0	-20.0	-5.4	5.6	10.4	59
Moldova	4670	-2.4	-17.5	-29.1	-1.2	-31.2	-3.0	-8.0	1.3	35
Russia	7720	-3.6	-5.0	-14.5	-8.7	-12.6	-4.0	-4.9	0.4	57
Tajikistan	3010	-1.6	-7.1	-29.0	-11.0	-18.9	-12.5	-4.4	2.2	40
Turkmenistan	4230	2.0	-4.7	-5.3	-10.0	-18.8	-8.2	-8.0	-25.0	43
Ukraine	5680	-3.4	-11.6	-13.7	-14.2	-23.0	-12.2	-10.0	-3.2	37
Uzbekistan	2740	1.6	-0.5	-11.1	-2.3	-4.2	-0.9	1.6	2.4	87
Commonwealth of Indep. States				-14.3	-9.3	-13.5	-4.9	-4.6	0.5	56
ALL				-10.5	-5.5	-7.1	-1.1	-1.3	1.6	71

	1990	1991	1992	1993	1994	1995	1996	Averages
Albania	1.61	-0.67	-2.15	-0.69	1.07	1.81	.	0.16
Armenia	1.81	1.83	1.86	1.50	0.43	0.32	.	1.29
Azerbaijan	1.06	1.16	1.24	0.98	0.74	0.68	.	0.98
Belarus	0.30	0.11	0.41	0.43	-0.01	-0.16	.	0.18
Bulgaria	-1.79	-0.99	-1.07	-0.80	-0.44	-0.31	-0.50	-0.84
Croatia	0.23	0.12	-0.03	-0.07	-0.02	0.00	0.50	0.10
Czech Republic	0.01	-0.52	0.09	0.13	0.05	-0.04	-0.20	-0.07
Estonia	-0.44	-0.32	-1.40	-1.81	-1.12	-0.80	.	-0.98
Macedonia	0.50	0.54	0.83	1.31	0.80	0.92	.	0.82
Georgia	0.21	0.06	-0.16	-0.30	-0.38	-0.33	.	-0.15
Hungary	-0.32	-0.18	-0.21	-0.29	-0.32	-0.31	-0.37	-0.29
Kazakhstan	0.77	0.82	0.57	-0.06	-0.90	-1.22	.	0.00
Kyrgyzstan	1.55	1.32	0.90	-0.22	-0.22	0.94	.	0.71
Latvia	-0.50	-0.31	-1.16	-1.73	-1.49	-1.23	.	-1.07
Lithuania	0.84	0.54	0.00	-0.32	-0.24	-0.16	.	0.11
Moldova	0.32	-0.02	-0.24	-0.05	0.00	-0.14	.	-0.02
Poland	0.41	0.33	0.31	0.25	0.22	0.18	0.10	0.26
Romania	0.24	-0.09	-1.71	-0.15	-0.11	-0.17	-0.30	-0.33
Russia	0.45	0.22	0.04	-0.10	-0.13	-0.10	-0.30	0.01
Slovakia	-0.27	0.00	0.44	0.34	0.43	0.41	0.20	0.22
Slovenia	-0.07	0.18	-0.25	-1.49	1.12	0.16	0.20	-0.02
Tajikistan	2.41	3.04	1.96	1.20	2.00	1.48	.	2.02
Turkmenistan	2.52	2.56	7.18	6.85	2.27	2.32	.	3.95
Ukraine	0.23	0.21	0.29	0.06	-0.49	-0.71	-0.80	-0.18
Uzbekistan	2.63	2.16	2.37	2.30	1.96	1.76	.	2.20

<i>Averages</i>	<i>0.59</i>	<i>0.48</i>	<i>0.40</i>	<i>0.29</i>	<i>0.21</i>	<i>0.21</i>	<i>-0.15</i>	<i>0.36</i>
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Table 4 a. Cross Sectional Dimension, Barro Specification Dependent Variable is GDP Growth.

Constant	Y0	PRIM	SEC	GCONS	GEXP	CIS	R2	n
-8.17756 ** (-3.384)	0.0004942 (0.200)						0.0651	25
-14.4674 (-1.443)	.0003828 (1.025)	.0748524 (0.707)					0.0806	24
-14.06185 (-1.362)	.0003929 (0.951)	.0746687 (0.692)	-.0055094 (-0.064)				0.0808	24
-14.17136 (-1.393)	.0003486 (0.862)	.0570617 (0.580)	-.0367093 (-0.390)	.2574992 (0.216)			0.1484	24
-26.2301 ** (-2.646)	.0000403 (0.097)	.0527123 (0.505)	.0690114 (0.486)		.2554616 ** (3.447)		0.3069	24
-25.6206 ** (-4.874)	-.000442 (-1.292)	.054615 (1.118)	.1654723 ** (2.554)		.1721145 ** (2.136)	-5.5308 ** (-3.916)	0.6168	24

Notes: ** denotes statistically significant at the 5% level, * denotes statistically significant at the 10% level. In the first rows are the coefficients, and below are *t*-values (corrected for heteroskedasticity).

Table 4 b Cross sectional Dimension, Levine and Renelt Specification Dependent Variable is GDP Growth.

Constant	Y0	POPGRO	SEC	INV	CIS	R2	n
-6.952243 ** (-2.480)	.0003196 (0.747)	-.6866224 (-1.007)				0.0901	25
-7.365 (-1.106)	.0004078 (0.737)	-.1892802 (-0.138)	-.0016277 (-0.018)			0.0555	24
-9.626187 (-1.370)	.0000961 (0.167)	-.5444761 (-0.449)	-.0121977 (-0.121)	.2487235 (0.193)		0.1318	24
-12.668 ** (-2.561)	-.0002036 (-0.528)	.751854 (0.818)	.098308 (0.131)	.173523 (0.200)	-6.5013 ** (-4.177)	0.5572	24

Notes: ** denotes statistically significant at the 5% level, * denotes statistically significant at the 10% level. In the first rows are the coefficients, and below are *t*-values (corrected for heteroskedasticity).

Table 5 a Panel Dimension, Barro Specification Dependent Variable is GDP Growth.

Constant	Y0	PRIM	SEC	GCONS	GEXP	CIS	R2	n
-7.1269 ** (-4.244)	.000377 (1.168)						0.0054	176
-8.712172 (-0.940)	.0007686 (1.629)	-.0186068 (-0.183)					0.0232	112
-2.604547 (-0.242)	.0009618 ** (2.151)	-.0160645 (-0.158)	-.089626 (-1.052)				0.0355	112
-6.639448 (-0.600)	.0006585 (1.388)	.0042718 (0.039)	-.0730317 (-0.786)	.1571764 (0.843)			0.0253	105
11.31079 (0.872)	.001629 ** (3.128)	-.0661982 (-0.660)	-.15446 * (-1.717)		-.1530664 (-1.414)		0.0828	103
6.989247 (0.582)	.0007117 (1.458)	-.0607579 (-0.645)	-.0187423 (-0.225)		-.1536471 (-1.404)	-7.44937 ** (-3.657)	0.1741	103

Notes: ** denotes statistically significant at the 5% level, * denotes statistically significant at the 10% level. In the first rows are the coefficients, and below are *t*-values (corrected for heteroskedasticity).

Table 5 b Panel Dimension, Levine and Renelt Specification Dependent Variable is GDP Growth.

Constant	Y0	POPGRO	SEC	INV	CIS	R2	n
-11.3655 ** (-5.328)	.00083 ** (2.125)	-.1679644 (-0.283)				0.0267	136
-2.225396 (-0.335)	.00099 ** (2.328)	.9637931 (1.029)	-1.1257302 (-1.479)			0.0387	119
-2.130519 (-0.305)	.001007 ** (2.182)	1.077994 (1.121)	-1.1225618 (-1.422)	-.0171085 (-0.080)		0.0387	116
-4.971016 (-0.784)	.0002638 (0.521)	2.16138 ** (2.260)	-.0003486 (-0.005)	-.0279797 (-0.126)	-8.5019 ** (-4.231)	0.1516	116

Notes: ** denotes statistically significant at the 5% level, * denotes statistically significant at the 10% level. In the first rows are the coefficients, and below are *t*-values (corrected for heteroskedasticity).

Solving Preferences: Economic Growth Versus Inflation, or Possibly Both? Situation in the Czech Republic as Compared with Hungary and Poland

Jaroslav Kux

1. Aim of the Paper

Practically any transition country is, at certain point of time, facing more or less serious problems, how to continue efficiently in the transformation processes. In other words, optimal strategies for further continuation of the transition should be decided, based on decision of priorities and selection of relatively best tools to achieve the agreed goals.

This was also the case of the Czech Republic. Although from the very beginning of the transformation of the economy generally strict financial and monetary policies were applied, later with more moderate restrictions, the developments of the last three - four years called for certain revision of the policies and decision of new priorities.

The aim of the paper is to mention some aspects of the discussed strategies in the Czech Republic and to try to compare them, at least on bases of some examples, with the partly different approaches of other transition countries - Hungary and Poland. The character of the paper is more empirical illustrating problems and solutions in the form of real data, rather than a purely theoretical paper, for which other authors already were or are more competent.

First, brief summary of main economic developments in the three countries is presented. Then the economic situation in the last periods 1995 - 1997 is explained, with a Czech dilemma: what to prefer - economic growth with potential risks of long-term increased inflation, or vice versa - fight against inflation with potential risks of certain stagnation of economic growth. Examples of approaches in Hungary and Poland in this period are presented in this context. The Czech story is probably not yet finished, as the new left-oriented government of social democrats is reopening the question in 1998 again.

The summary of the paper raises a question, whether these two, to a certain point

contradictory goals - economic growth versus inflation - are really contradictory. It looks that proper combination of tools may lead to a certain compromise. Finally, a prognosis of economic developments in the Czech Republic during the next two years is presented.

2. Brief Summary of General Economic Situation and Developments in the Czech Republic as Compared with Hungary and Poland during the Years of Transition

The starting strategies to the transformation processes, although in a certain sense generally similar, still partly differed in the three countries:

Poland began with serious transformation steps already before 1990 - shock therapy connected with far reaching prices deregulation (inflation 250 % in 1989 and 600 % in 1990!), commercialization of many state owned enterprises, beginning of building up market infrastructure, internal convertibility of currencies, liberalization of foreign trade, etc.; main problem remaining privatization process.

Hungary began with partial economic reforms also already during 80ties. After social and political changes Hungary seemed to prefer strategy of gradual steps to full shock therapy (prices increased gradually by 30 - 35 %, later mostly by 20 - 30 % annually), the process of privatization had signs of hesitation and slow down.

Czech Republic, after short discussion, decided similarly like in Poland to implement shock therapy (inflation increased in 1990 by 50 - 60 % only, however) and has implemented other necessary steps (partial convertibility of currency, liberalization of foreign trade), including quickest privatization (so called „small privatization“ selling parts of enterprises or smaller establishment to Czech population, later two waves of „large privatization“, of which most popular was coupon - voucher privatization); later it showed, however, this might be the relatively quickest way, but probably not the most efficient one, being often too formal - probably main reason for later serious delay in restructuring of the units.

The first results of the transformation processes from centrally planned economies to market oriented ones were to an important degree, with some exceptions, similar in the three countries, at least as concerns the tendencies.

Annex table 1

Production has fallen during the first years of nineties remarkably in all the three countries, so did employment (in Hungary the fall of employment continued practically the whole transition period till now). In 1997 GDP has not yet fully achieved the level of 1990 in the Czech Republic and Hungary, while in Poland the annual regular growth of GDP since 1992 meant higher level of GDP in 1997 as compared with 1990 by approximately already one quarter. Only during 1996 - 1997 productivity has slightly exceeded the level of 1990 in the Czech Republic, while in the other two countries the fall of employment has exceeded the developments of production, so that productivity in 1997 was already higher as compared with the level of 1990 by 20 % (Hungary) and 40 % (Poland). Nevertheless, the general level of economic developments as measured by GDP per capita, is - particularly due to the historical developments in the whole pre-transition period - still higher in the Czech Republic by some 40 % than in Hungary and even more than in Poland (see Agenda 2000).

Inflation became due to deregulation of prices one of the most serious problems in all three countries, although in the Czech Republic, after the price shock in 1991 the annual inflation during 1994 - 1997 was not exceeding 10 %. In Hungary and Poland inflation means generally more important problem, although in the last periods it has fallen remarkably. Real wages after rapid fall in connection with the deregulation of prices in the Czech Republic and Poland continued to grow again later (in the Czech Republic the annual growth of real wages heavily exceeded the growth of productivity, which turned into one of most serious problems in the economy). The more important fall of real wages occurred in Hungary in connection with the social expenditures restriction during 1995 - 1996, so that Hungary is now the only country - out of the three - with real wages still below 1990 levels.

Unemployment, a phenomena practically not known before, became another negative feature of the transformation processes, at least for Hungary and Poland, with decreasing tendencies in the last periods. In the Czech Republic, with traditionally low unemployment from the very beginning of the transition, unemployment is already increasing in the last periods, namely due to stagnation of the economy and beginning more serious restructuring of the production units.

3. Newly Emerging Economic Problems

Annex table 2

All three countries meet new emerging problems in the last periods. Foreign trade balance became passive due to export problems and gradually even total current account of balance of payments turned to deficit, as the trade with services could not compensate the deficits in trade with goods any more (certain exception being Poland in 1995 - 1996). With the exception of Poland again even the results of capital and financial accounts of balance of payments could not compensate the deficits of the current account, so that total balance of payments in the Czech Republic (for 1997) and Hungary (for 1996 and 1997) became passive. Direct foreign investment targeted mainly into Hungarian economy in 1995 (four times higher as compared with Poland), has rapidly decreased in this country till 1997, similarly like in case of the Czech Republic. For imagination: direct foreign investment into these three countries decreased from 8 bill. USD in 1995 to slightly more than half in 1997 (5 bill. USD). All countries had therefore to accept or to prepare (like in the Czech Republic, for example) further steps how to involve foreign capital investment into their countries again.

Foreign debt in Hungary and Poland is gradually decreasing in the last two years, although it is still extremely high; in the Czech Republic being very low still in 1994 foreign debt has doubled till 1997. Also state budget turned into deficit in all three countries in the last periods. In none country, however, the ratio of public debts and state budget deficits to GDP has exceeded the Maastricht criteria for monetary union.

Not speaking about the mentioned problems of external relations (trade balance, balance of payments, foreign debt, exchange rates), two groups of problems seemed important in the last periods: decrease of rates of economic growth (as measured by GDP) particularly in the Czech Republic and Hungary (except 1997) and high inflation (exceeding heavily the Maastricht criteria) particularly in Poland and in Hungary. The countries had to react somehow on this situation.

4. Czech Dilemma - Stimulating Economic Growth or Fight against Inflation?

In 1995 heavy discussion among Czech economists but also politicians started what should the economic priorities for the next periods be. Although inflation was lowest as compared with the other two countries, it was considered that still relatively high long-term inflation exceeding several times the standards in EU should become priority No 1, although discussed steps to achieve this goal in reasonable future might result in potential slow down of economic growth. Usually two main forms of measures are used for this purpose: one is the governmental policy (mainly decisions on the speed of price deregulation policies as well as other state budget measures), the other being central bank policy (mainly the interest rates policies). Although these main instruments should be on principle in line and properly coordinated, the practice is often somewhat different.

The government idea was quick and full deregulation of still partly regulated commodities and services, first of all of housing, fuel, energy, but also of public transportation, telecommunications and some other services. The annual inflation in the last years round 9 % was represented by 5 - 6 % of core or net inflation (excluding deregulation measures) and the rest was the influence or gradual partial deregulation. The idea was to stop quickly with any kind of price regulation till 2000, with probable temporary increase of inflation in the first period (compensated to certain groups of population by various, by that period not yet fully clarified social compensations), with the final effect to come closer to standard inflation of the EU countries immediately after 2000.

Similarly, the central bank policies were targeted also to this goal. During 1996 several measures were taken: interest rates of central bank were increased by 1 - 1.5 % and mandatory minimum bank reserves of commercial banks increased even by 3 %. 20 bill. of national currency were thus withdrawn from the financial markets with the result of making money much more expensive than before and to reduce thus the inflation rates. Demand of population really decreased as a result, firms were lacking money, investment decreased and gradually stopped, which necessarily resulted in future decrease of even stagnation of economic growth. External problems with foreign trade and balance of payments, including foreign currency problems and political instability, but also state budget problems (revenues decreased, followed by necessary restrictions on the expenditure side) worsened the general situation.

Chart No 1

The policies of Hungary and Poland in the same periods, at least as concerns the bank policies, were somewhat different. Although inflation in these two countries was much higher than was the case of the Czech Republic, it seemed their priorities was stimulation of further economic growth rather than direct solving the inflation problem by these measures.

Of course, in the meantime further measures had to be accepted practically in all three countries. During 1997, for example, the Czech National Bank during the financial crisis has to increase rapidly the interest rates again with even worsening effect on economic growth, later the minimum bank reserves were decreased vice versa. General situation enabled to decrease the interest rates in the Czech Republic in August 1998 only. Similarly, latest decrease of interest rates in Hungary occurred also in August 1998. The chart illustrates just one example of possible different approaches to the production x inflation

problem. However, the Czech story is far from being at the end. New left-oriented government, winner of the 1998 extraordinary elections, is reopening this question again. Although nothing fully decided, there appear strong arguments against such quick deregulation of prices (the discussed plan is to postpone this by some two years till at least 2002) and to prefer steps supporting revival of economic growth. The possible tools are to attract foreign capital investment and domestic firms activities through tax policies, increase of expenditure side of state budget (part. social expenditures) along with certain increase of budget revenues (increase of social insurance and consumption taxes), initiation of growth of domestic demand of population and of investment activities, support of export etc., with not yet decided time horizon, even if with potential inflation risks.

5. Summary, Economic Prognosis

Economic developments in the three transition countries have some similarities, but also important differences. The strategies differing in some cases partly at the beginning stage of the transformation differ also during the transition process.

In the Czech Republic the main dilemma how to continue in the transformation process, or in other words, what (new) strategies to decide and implement, is the problem of priorities: economic growth versus inflation. The previous government strategy considering the inflation problem as one of the main problems of Czech economy is nowadays - particularly in the lights of worsening economic situation - newly discussed by the new left-oriented government of social democrats and the discussion may result in deciding new priority: preference of stimulating economic growth to inflation problems. Anyway, the theory but also examples of other transition countries show, that very much depends on tools chosen to achieve the goal. It seems clear even in practice, that proper combination of tools may still lead to revival or certain acceleration of economic growth with acceptable inflation developments. These two goals are probably not necessarily fully contradictory.

And the prognosis for economic development in the Czech Republic for the next two years?

1997 and expected 1998 results signalize, that economic developments as measured by GDP is stagnating. Main reasons for these latest developments were partly of long-term character (problems of privatization and restructuring, of financial market, inner and outer unbalance etc.), but also of short-term character (monetary, budget and wages restrictions targeting on unbalance problems, even if with a result of restriction of domestic demand). Already in 1997 domestic demand actually decreased (particularly fixed capital formation and consumption of government), but this decrease was compensated by increase of export and of stock of produced goods. Similar development is expected during 1998 with the exception of development of stocks which as compared with the previous year vice versa decreased. For first half of 1998 the fall of GDP is expected by approximately 1 % - two subsequent quarters fall may already mean the recession - (compare with +5 % in Hungary and +6.5 % for Poland in IQ1998!), certain mild increase is expected for second half of 1998 only, with the final whole 1998 result of zero increase. The improvements in GDP developments will hopefully continue since mentioned second half of 1998 through the whole 1999, so that mild increase of 1999 GDP is expected for 1 - 2 %. The reasons for this prognosis are increase of demand of population again (increase of nominal wages, decrease of inflation resulting in increase of rates or real wages) and new increase of investment

activities (expected at least partial monetary restrictions and increase of foreign capital inflows). It looks extremely low unemployment in the Czech Republic becomes a history already: the unemployment outlook for 1998 - 1999 of almost 7 - 8 % will probably be still lower than in the other transition countries, but already above many OECD countries.

Expected 1998 - 1999 results in the Czech Republic may be summarized as:

Variable	1997 results	1998 progn.	1999 progn.
Annual rates of growth:			
GDP	1.0	0.0	1 - 2
of which: household consump.	1.6	- 2.0	1 - 2
government.consumpt.	- 2.1	- 2.5	0 - 2
fixed capit. formation	- 4.9	- 3.0	1 - 3
exports (SNA figures)	21.5	25	20 - 23
imports (SNA figures)	14.5	15	17 - 19
inflation (consumer prices)	8.5	11 - 12	9 - 10
real wages	3.1	- 0.5	1 - 2
End of the year data:			
Unemployment rate (%)	5.2	6.5 - 7	7 - 8
Curr. account - bill. USD 1)	- 3.2	- 1 - 1.5	- 1
- in % of GDP 1)	- 6.1	- 2.5	- 1 - 1.5

Note: 1) current account of balance of payments

Source: 1997 - official data of Czech Statistical Office; 1998, 1999 - based on prognoses of CSO, of some other institutions and own prognosis of the author

Table 1. Main Economic Indicators 1990-1997 in Czech Republic, Hungary and Poland

Variable	Unit	Year	Czech Rep.	Hungary	Poland
Population	mil.	1996	10.3	10.2	38.6
GDP	% 1)	1990	- 1.2	- 4.0	-11.6
		1991	-11.5	-10.7	- 7.0
		1992	- 3.3	- 3.1	2.6
		1993	0.6	- 0.6	3.8
		1994	2.7	2.9	5.2
		1995	6.4	1.5	7.0
		1996	3.9	1.3	6.1
		1997	1.0	4.4	6.9
	% 1997/1990	1997	- 3.4	- 5.0	26.5
Employment	% 1)	1990	- 0.9	- 2.1	- 4.2
		1991	- 5.5	- 4.7	- 5.9
		1992	- 2.6	.	- 4.2
		1993	- 1.6	- 6.6	.
		1994	0.8	- 2.0	- 1.6
		1995	2.6	- 2.0	1.1
		1996	0.7	- 7.0	0.5
		1997	- 1.0	- 1.7	0.7
	% 1997/1990	1997	- 6.7	- 22.0	- 10.0
Productivity	% 1)	1990	- 0.3	- 1.9	- 7.7
		1991	- 6.3	- 6.3	- 1.2
		1992	- 0.7	.	7.1
		1993	2.2	6.4	.
		1994	1.9	5.0	6.9
		1995	3.7	3.6	5.8
		1996	3.3	8.9	5.6
		1997	2.0	6.2	6.2
	% 1997/1990	1997	3.5	21.8	40.5
Inflation	% 1)	1990	9.7	28.9	585.8
		1991	56.6	35.0	70.3
		1992	11.1	23.0	43.0
		1993	20.8	22.5	35.3
		1994	10.0	18.8	32.2
		1995	9.1	28.2	27.9
		1996	8.8	23.6	19.9
		1997	8.5	18.3	14.9
	% 1997/1990	1997	297.8	453.0	995.3
Real wages	% 1)	1990	- 5.5	- 0.2	- 27.4
		1991	- 26.3	- 3.7	0.2
		1992	10.3	1.7	- 2.9
		1993	3.6	- 0.4	- 1.1
		1994	7.7	7.0	2.5
		1995	8.6	- 12.2	3.9
		1997	3.1	4.9	7.3
	% 1997/1990	1997	10.5	- 9.0	16.0
Unemployment rate	% 2)	1990	0.3	0.8	3.4
		1991	2.6	4.1	9.7
		1992	3.1	10.3	13.6
		1993	3.0	12.9	14.9
		1994	3.3	11.3	16.5
		1995	2.9	10.9	14.9
		1996	3.5	10.7	13.2
		1997	5.2	10.4	10.5

Notes: 1) increase, decrease as compared with previous year; 2) registered, annual average, since 1995 end of the year

Sources: Czech Republic - official time series of the Czech Statistical Office; Hungary, Poland - Employment Observatory, Central and Eastern Europe No 8/1995 and Statistical Bulletin CESTAT, No 1997/4 (as official time series might be in these countries in the mean time revised - see for example employment figures for Hungary - the figures overtaken from the above mentioned sources may not always reflect the real situation and has to be taken with care just for general information)

Table 2. Recent Economic Developments 1994-1997 in Czech Republic, Hungary and Poland

Variable	Unit	Year	Czech Rep.	Hungary	Poland
Exports	% 1)	1994	10.6	16.6	18.3
		1995	23.2	8.4	16.7
		1996	3.5	4.6	9.7
		1997	20.2	29.6	14.2 x/
Imports	% 1)	1994	17.7	5.5	28.0 x/
		1995	33.7	-3.9	20.5
		1996	12.2	5.5	28.0
		1997	13.3	25.6	22.4 x/
Current account 2)	bill. USD	1994	-0.8	-3.9	-0.9
		1995	-1.4	-2.5	5.5
		1996	-4.3	-1.7	0.2
		1997	-3.2	-1.0	-0.3
Cap.-fin. account 2)	bill. USD	1995	8.2	7.0	2.8
		1996	4.3	-1.6	4.8
		1997	1.1	-0.3	5.8 x/
Dir. for investment	bill. USD	1995	2.5	4.4	1.1
		1996	1.4	2.0	2.7
		1997	1.3	1.7	2.0 x/
Foreign debt	bill. USD	1994	10.7	28.5	42.2
		1995	16.5	31.7	44.0
		1996	20.8	27.6	40.6
		1997	21.4	21.7	38.0 x/
State budget balan.	bill. nat. cur	1994	10.4	-321.7	-5.7
		1995	7.2	-307.1	-7.5
		1996	-1.5	-134.8	-9.1
		1997	-15.7	-342.1	-5.9
Exchange rates	n.c./USD3)	1994	28.1	110.7	2.44
		1995	26.6	139.5	2.47
		1996	27.3	165.1	2.88
		1997	34.6	203.5	3.52
	n.c./Kc 4)	1994	1	3.94	0.09
		1995	1	5.24	0.09
		1996	1	6.05	0.11
		1997	1	5.88	0.10
Official disc. rate	%	1995	9.5	28.0	25.0
		1996	10.5	23.0	22.0
		1997	13.0	20.5	24.5
Deposit inter. Rates 5)	%	1994	7.1	23.6	29.0
		1995	7.0	26.1	22.0
		1996	6.8	20.1	18.5
		1997	8.0	17.6	19.5
Credit inter. rates 5)	%	1994	13.1	29.7	28.0
		1995	12.8	32.2	25.0
		1996	12.5	24.0	22.0
		1997	13.9	20.8	24.5

Notes: 1) increase, decrease as compared with previous year; 2) of balance of payments; 3) national currency per 1 USD; 4) national currency per 1 Kc; 5) interest rates of commercial banks; x/ I-III. Q

Sources: Czech Republic - official time series of Czech Statistical Office, Ministry of finance and Czech National Bank; Hungary, Poland- Statistical Bulletin CESTAT, No 1997/4

Chart 1. Economic Priorities and Measures (Example of Different Approaches in CR, Hungary and Poland 1995-1998)

	CZECH REP.	HUNGARY	POLAND
I. Economic situation in 1995:			
GDP growth in %	6.4	1.5	7.0
Foreign trade balance in bill. USD	- 3.9	- 2.6	- 6.2
Inflation in %	9.1	28.2	7.9
II. Priorities decided in 1996:			
priority	decrease of inflation		increase of economic growth
(through increase of demand and of investment)			
potential negative consequences	decrease of economic growth	increase of inflation	
III. Measures taken in bank policies during 1996:			
change of interest rates			
- lombard	+ 1.5 (14.0 %)	- 0.5	- 1 (25 %)
- discount	+ 1.0 (10.5 %)	- 0.5 (25.5)	- 1 (22 %)
change of minimum bank reserves	+ 3.0 (11.5 %)		
change of floating exchange rate range	+/- 7.5 %		
IV. 1996 - 1997 results:			
GDP growth in % 1996	3.9	1.3	6.1
1997	1.0	4.4	6.9
inflation in % 1996	8.8	23.6	19.9
1997	8.5	18.3	14.9
V. 1997 - 1998 measures:			
1997: further change of interest rates			
- lombard	(19 %)		
- discount	(13 %)	(20.5 %)	(24.5)
	decrease of minimum bank reserves		
	full floating exchange rates		
1998: decrease of interest rates			
- lombard	(16 %)		
- discount	(11.5 %)		

Stabilization and Growth in Transition Economies: the Case of Vietnam

Thi Anh-Dao Tran*

1. Introduction

After nearly one decade of transitional process from a centrally planned to a market-based system, it's attempting the impossible to try to assess the current state of the economic transformation, since cumulative experiences across countries in such a transition differ markedly. As the World Bank (1996) has suggested, in spite of a common transition undertaken in order to replace central planning with market mechanisms, the starting points, the approach of the reform process and its results vary from a country to another. Nevertheless, there is a fact that emerged from early comparative discussions: the Asian countries in quest of a « socialist market economy » have undoubtedly outperformed the nations of Eastern and Central Europe. At the time the process of transformation began, the latter experienced a drastic collapse of output, severe social costs and high inflation, whereas the former (except Mongolia) registered uninterrupted positive growth, despite successive stabilization programs and liberalization reforms.

As the experiences of individual countries and groups of countries have been examined, new issues emerged and lessons have been drawn. Accordingly, two series of explanations have been set to justify the varied performances of transition:

- 1- Initial conditions and inherited economic and organizational structures. The interaction of macroeconomic policies with the economic reform process heavily depends on national features at the time the transition began.
- 2- The strategy of reform which was followed. Given the goal of moving to a market economy, the debate over the speed of reforms has been dropped and replaced with issues about optimal sequencing. Should macroeconomic stabilization be implemented first? Is it possible to emphasize the process of demonopolization and structural adjustment without applying stabilization program?

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The current macroeconomic performance of the group of Visegrad (Czech Republic, Hungary, Poland, Slovak Republic) has provided a possible relationship between stabilization and growth: in those countries, stabilization was applied first because lowering inflation is necessary for the resumption of growth. Empirical evidence and results of econometric analyses have then suggested a strong causation from macroeconomic stability to growth in Eastern and Central Europe (de Melo-Gelb, 1996; Fischer and alii, 1996). It has also been argued that the countries which are the most advanced in market-oriented reforms (measured by a Cumulative Liberalization Index, CLI¹) are also the ones which registered the least cumulated output decline and the earliest growth recovery.

This paper focuses on the lessons and issues emerging from a comparative discussion about stabilization and growth in the transitional countries of Asia and Eastern Europe. More precisely, our study highlights the case of Vietnam, which belongs to the initial group of well-performing countries, in comparison with the group of Visegrad.

We first present and summarize macroeconomics of transition; then, we attempt to understand why these experiences have differed significantly, focusing on the two series of explanations mentioned above.

2. Stabilization and Growth in Vietnam: the Early Experience

Within the space of two decades, from the country reunification in 1975 to its integration into the ASEAN and the AFTA (ASEAN Free Trade Agreement) in 1995, Vietnam has gone through deep systemic changes (Le Van and alii, 1998a). Although the announcement of Doi Moi in 1986 inaugurated the transition experience, this option was only the political outcome of economic hesitations and confusions emerging from the first reform period in 1979-81. As in Eastern Europe at various times, these early attempts at reform did not have the explicit goal of making transition to a market economy, but were rather a selective response to the deep crisis that affected the whole country in 1978-79 (Tran, 1998). However, in contrast to the European transitional economies, real GDP has grown uninterruptedly since Doi Moi was launched; more remarkably, macroeconomic stability and external performance have been quickly achieved after the stabilization program of 1989. These successes have been widely recognized and Vietnam is now perceived as a nascent « Asian tiger ».

2.1. A Macroeconomic Stabilization Achievement...

At the onset of the transition process, experiences across countries registered huge price jumps, going beyond the widest expectations (*Table 1*). When the average performance for the group of Central and Eastern Europe is profiled, annual inflation rate reached 367% in 1992; but after 1994, most countries have reduced inflation to the double-digit range, bringing the average back down to 24,4% in 1995. While one-time price jumps in the first stage of transition were associated with repressed inflation and output constraints involved by central planning (Le Van and alii, 1998b), major controversies arose over their extent.

¹ The World Bank has constructed an economic liberalization index to capture the depth of structural reforms in each year over the 1989-94 period. This index is a weighted average of three indices: price liberalization and competition with a weight of 0,3; trade and foreign exchange regime with a weight of 0,3; privatization and banking reform with a weight of 0,4.

As regards the former Eastern bloc, this phenomenon might have been exacerbated by measures of price liberalization, trade controls withdrawal and initial devaluation, which were both too radical. But alternatively, one could argue that, coupled with restrictive demand policies, these measures have undoubtedly dissipated the monetary overhang inherited from the centrally planned system and, in turn, got the former socialist countries out of the shortage economy and its situation of sellers' market.

Moreover, the rapid reorientation of external trade towards Western Europe (as the previous trading arrangements in the CMEA collapsed) and the overall picture conveyed by the macroeconomic indicators (inflation reduced to an annual rate below 50%, external and budgetary deficits lowered to the standard levels of market economies), would have proved the success of stabilization and liberalization programs in Eastern Europe.

<i>Country</i>	<i>t</i>	<i>t+1</i>	<i>t+2</i>	<i>t+3</i>	<i>t+4</i>	<i>t+5</i>	<i>t+6</i>
Hungary	17	29	34,2	22,9	22,5	19	28,2
Poland	251*	586	70,3	43	35,3	32,2	27,8
Czech Republic	2,3	10,8	56,7	11,1	20,8	10,2	9,1
Slovak Republic	0	10,8	61,2	10,1	23	14	9,9
Vietnam**	774,7	231,8	393,5	34,5	67,5	67,6	17,6

Sources: World Bank, Fischer and alii (1996)

t=year in which the transition proces started: Vietnam=1986; Eastern Europe=1989.

* 639,6% when calculated from December to December

** inflation calculated from December to December

Comparing its evolution over time, inflation in Vietnam was also extremely high within the period preceding the first stabilization attempt in 1989 and, more generally, macroeconomic stability has been achieved within a longer time period than in Eastern Europe. This was in fact the outcome of a dual-track pricing system experimented in the country since 1980. As in China, it had enabled the introduction of market mechanisms and behaviors in the planned economy; on the other hand, it continued to maintain price controls, as state enterprises still faced soft budget constraint and competition from the non-state sector was still low.

But as liberalization reforms were given more scope and fueled rapid development of the non-state sector (putting competitive pressures on the state sector), the number of price-controlled goods was continually reduced and the remaining ones rationalized consistently with the market standards. Hence, when radical price liberalization and exchange rate unification occurred in 1989, microeconomic agents were already submitted to price signals and market discipline.

In contrast to its big neighbor, it is nonetheless striking that the presence of a monetary overhang in Vietnam and the failure of currency, price and wage reforms implemented in 1985 (which explained the high inflation rate in the starting date of transition), had both enlarged the spread between administered and market prices. These two phenomena were primarily explained by the lack of internal and external financing in the Vietnamese economy at the early period of reform; accordingly, state government had

no alternative but to satisfy financing requirements by money creation.

This fostered the price spread and macroeconomic imbalances through two channels: on one hand, since liberalization reforms stimulated market incentive framework, microeconomic agents gradually diverted a growing part of good supply from the planned economy toward the liberalized sector and, therefore, exacerbated chronic shortages in the former. On the other hand, price and wage subsidies accounted for a very large part of budgetary expenditures before price reform in 1989; so, the widening gap between controlled prices and the market ones aggravated the fiscal deficit and nourished, in turn, a vicious circle between dual price/budget deficit/money growth within the country.

The attempt to reform currency, price and wage in 1985 deteriorated further the situation: first, the legal exchange of old Dong at a rate of 10 to 1 for new Dong spurred inflation like any currency reform. Second, coupled with the attempt by the government to pay the wages of state employees entirely in cash and to end price subsidies, this money inflation eroded the value of the public's new all-cash wage package. Therefore, economic agents began hoarding goods and aggravated widespread shortages.

Although the Vietnamese experience strongly suggests an inflation-fiscal deficit linkage, there is evidence that it reflects more a resource shortage within the economy than an excessive absorption. Between 1986 and 1989, fiscal deficits in Vietnam averaged 6% of GDP per annum (*table 2*); by contrast, observed data highlight larger average fiscal deficits before stabilization attempts in Eastern and Central Europe, around 8-10% of GDP (Fischer and alii, 1996). While the familiar argument is that the early stage of transition process drains saving, Vietnam is a counterexample to this argument since the growth of internal and external resources has been its major achievement: this has contributed to stabilize macroeconomic environment and, in turn, to spur domestic savings and support rapid growth.

First of all, the backward surge of money savings into the formal banking system after 1989 put an end to a financial disintermediation process. This phenomenon resulted from high levels of real deposit rates and from a range of institutional measures aimed at getting Dong-denominated assets more attractive, relative to good hoarding or safety reserves of gold and foreign currencies. The enlargement of the deposit base, and the correspondingly financial feedback, enabled a healthy expansion of domestic credit and a resorption of the monetary overhang inherited from the previous years. Furthermore, coupled with a massive unloading of goods onto the domestic market (owing to the end of speculative hoarding behavior), this phenomenon also facilitated price liberalization without fostering inflationary pressures.

Secondly, the improved revenue performance has strengthened rapidly fiscal position (*Table 2*): it resulted initially from rising oil revenue but thereafter, a tax reform initiated in 1990 has increased trade taxes (as trade volumes expanded) and revenue collection from state-owned enterprises. In contrast to the other transitional economies, improvements in the fiscal balance reflect the major contribution from the state sector to fiscal revenues in the wake of early successful government efforts to harden its budget constraint (see below).

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Total revenue	13,2	12,2	11,3	13,8	14,7	13,5	19	22,5	24,7	23,9
state enterprises	9,5	9,2	7,2	8	8,7	8,1	10,8	11,2	12,3	9,9
non-state sector	1,9	1,6	2,1	2,6	2,3	2,2	3	3,5	3,1	3,6
external trade	1	0,6	0,8	1,3	1,8	1,4	2	4,7	5,3	6,6
other revenue*	0,8	0,9	1,2	2	2	1,8	3,3	3,1	3,6	3,9
Current expenditure	13,2	12,7	13,8	15,7	15,4	12,2	14,9	20,1	18,9	19,1
of which: subsidies	2,9	4,9	5,3	0	0	0	0	0,2	0,1	0,1
Capital expenditure	5,9	3,9	4,4	5,8	5,1	2,8	5,8	7	6,9	5,4
Overall balance	-5,8	-4,4	-7,2	-7,5	-5,8	-1,5	-1,7	-4,6	-1,1	-0,5
foreign financing	2,2	1,4	2,4	1,5	3	1	2,4	2,7	0,1	-0,7
domestic financing	3,6	3	3	6	2,8	0,5	-0,7	1,8	1,5	1,2
State Bank	3,6	2,9	2,9	6,8	2	0,9	-2	0	0	0
State securities	0	0,1	0,1	-0,8	0,8	-0,4	1,3	1,8	1,5	1,2

Source: World Bank

* including oil revenue and taxes on joint-ventures

Finally, unprecedented rates of income growth and the country's reintegration into international community have ended bank financing of the budget deficit. Coupled with prudent fiscal policy, this deficit is now covered by state securities, disbursements of foreign grants and loans and, accordingly, is no more inflationary.

Familiar analysis of stabilization programs generally emphasizes the role of exchange rate developments on the behavior of inflation in highly dollarized economies. Parallel to administered prices removal, the Vietnamese government undertook policy actions to restore confidence in the Dong and to reduce the use of Dollars: overall, these efforts, through exchange rate unification and stabilization (*Figure 1*), have played an important role in the transition process.

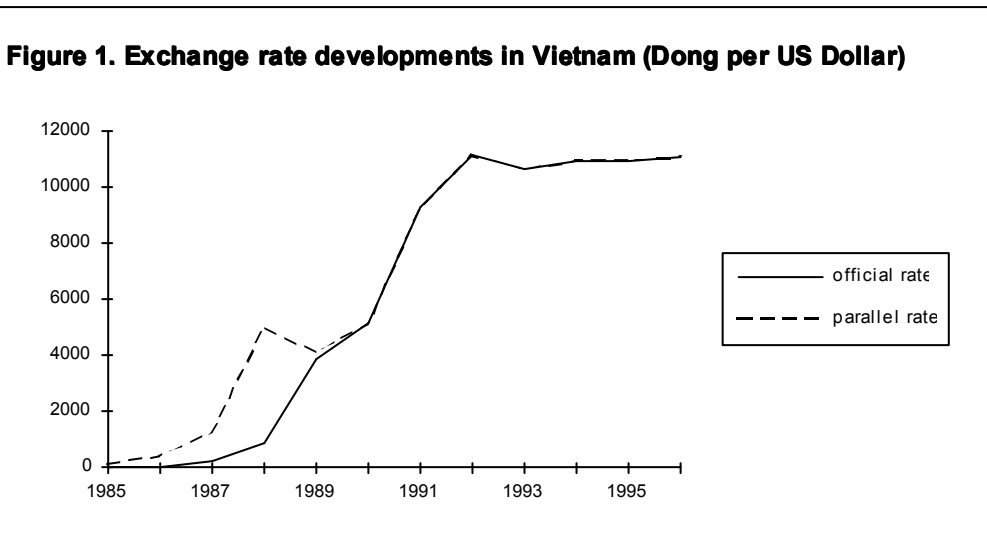
The Vietnam's success confirms, to a large extent, current issues about macroeconomics in developing nations which stress on the role of reputation and credibility in disinflation programs (Calvo-Vegh, 1993; Agenor-Montiel, 1996).

The government gave credibility to its stabilization program² first by policy measures aimed at regaining public confidence in macroeconomic management and in the formal financial system: banking sector reform, elimination of monetary financing coupled with reduction in the fiscal deficit, high real interest rates and financial deepening (which accelerated both the trends towards declining dollarization and the movement from currency to deposits).

² Vietnam adopted an exchange rate peg during the stabilization program: through 1991, the authorities adjusted the official exchange rate with the explicit objective of maintaining the official rate within a range of 10-20% of the parallel market rate. Following the establishment of foreign exchange trading floors in 1991, an interbank foreign exchange market was introduced in 1994, with buying and selling rates allowed to move within a bound of 0,5% around an official reference rate stipulated daily by the Central Bank (IMF, 1996).

Second, the government proceeded to internal convertibility of Dong by legalizing private holdings of gold and foreign currency deposits, by liberalizing the use of Dollars and by realigning the bilateral exchange rate close to the level in the parallel market³.

Finally, other policy measures contributed also to release foreign currency supply: in parallel with the legalization of foreign currency deposits which channeled a large amount of dollars from the formal to the informal economy, private remittances from Viet-Kieus (Vietnamese from abroad), exportations and direct investment inflows were encouraged. This supply extension, coupled with disinflation policy (which lowered the opportunity cost of using national currency), diminished currency substitution and stabilized exchange rate progressively. Now, there is little spread between the official and parallel market exchange rates and, at the same time, little volatility in both the nominal and real exchange rates. This achievement has provided strong confidence effects in the Dong and, more generally, in government policies.



Source: World Bank

2.2. ... In a Context of Uninterrupted Positive Growth

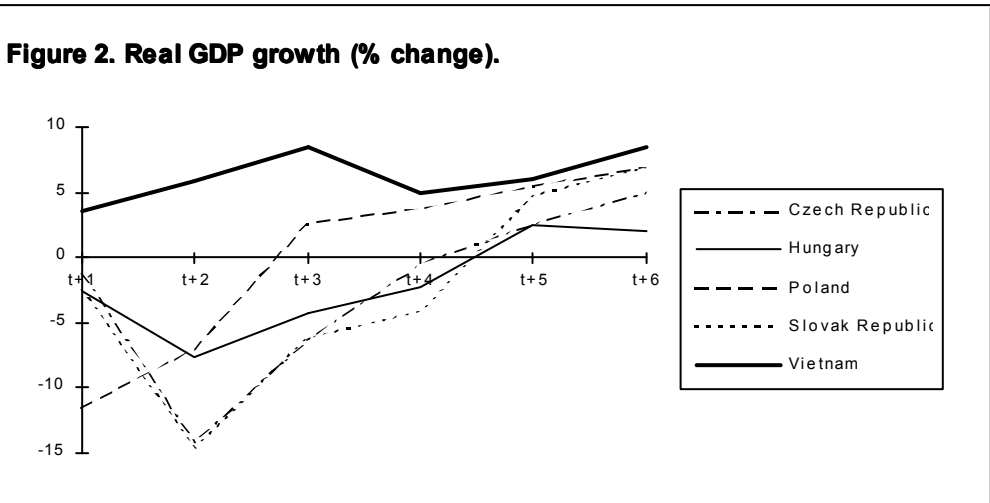
In spite of differences in initial conditions and in the reform strategy, transition economies experienced commonly economic contraction and increase of urban unemployment. During the first three years of the transition process, the real GDP decline reached 14% per annum in the whole group of Central and Eastern Europe and the level of real GDP in 1994 was about 60% of its initial level (Fischer and alii, 1996). At the same time, unemployment growth and the lift of subsidies (without being replaced by a social safety net) have widened income inequalities and swelled population living under the poverty line (Milanovic, 1995).

³ Until 1989, Vietnam maintained a system of multiple exchange rates: a rate for trade transactions within the central Plan, a rate for invisible transactions and a rate for trade transactions outside the Plan. The exchange rate unification was conducted in two steps: first, the government unified in 1988 the exchange rates for invisible transactions and trade transactions outside the Plan and at the same time, devalued the two official rates. Then, in 1989, it unified the two existing official rates and raised them close to the parallel market rate (IMF, 1996).

The overall picture of poor economic performance at the early stage of transition has been explained by four kinds of propositions (Blejer and alii, 1993; Blanchard and alii, 1994):

- 1) output mismeasurement due to biases in the data inherited from former statistical systems and to official underrecording of emerging private sector output.
- 2) supply-side shocks resulting from collapse of activities or enterprises previously protected by controlled prices, uncertainty raised by the Plan withdrawal (in the absence of new coordinating mechanisms), slow adjustment of producers to demand conditions, cost-push factors and credit crunch.
- 3) demand collapse due to stabilization programs which imposed too large restrictions on aggregate demand.
- 4) simultaneous supply-side and demand-side effects of the trade disruptions caused by the breakups of the Soviet Union and the CMEA.

Such a « U-shaped » curb was estimated to be ineluctable; furthermore, it has been argued that countries that achieved macroeconomic stabilization and undertook comprehensive liberalization reforms grow faster. Econometric analyses suggest that in those countries, output quickly began to recover two years after the date of stabilization (Fischer and alii, 1996; Sachs, 1996).



Sources: World Bank, GSO

In contrast to the cumulative output declines in Eastern Europe⁴, Vietnam has achieved remarkable performance in real GDP growth (*Figure 2*): while measured growth in the first years was on average negative for the former, the latter has recorded uninterrupted

⁴ Even in the Group of Visegrad which had superior economic performance, cumulative GDP decline within 1989-94 period averaged 15,5%.

positive growth since the start of the transition process. Observed data show negative rates for industrial value-added in 1989 and for the state sector in 1989 and 1990 (*Table 3*): but this generated only limited effect on GDP since both accounted in these two years respectively for 24% and 33% of GDP and most of real growth was driven by the agriculture and services sectors.

Transition experience of Vietnam suggests an inverse causation from growth to macroeconomic stability: while comparative discussions developed on Eastern Europe have argued that reducing high inflation is a precondition for the revival of growth, it is inversely real growth (due to structural reforms initiated before the date of stabilization) that has created preconditions to macroeconomic stabilization achievement in Vietnam.

Several factors contributed initially to release supply on good markets: dishoarding process in response to modifications in the incentive structure, liberalization of economic activities widely repressed in the pre-transition period (agriculture, services, external trade), utilization of excess capacity. At the same time, rapid inflows of imported commodities (officially or by smuggling) contributed to develop good markets and to narrow the supply-demand gap.

On the other side, disruptions in production, distribution and domestic trade generated by the transition process have been wholly absorbed by the extension of an out-planned economy. For example, competition strengthened by private retailers and traders can explain (among other factors) the strong supply response of agriculture sector to the reforms initiated under Doi Moi: on one hand, the better supply of agricultural inputs⁵ (such as fertilizers, insecticides,...) have contributed to increase the utilization rate of productive capacity and on the other hand, more marketing opportunities of agricultural products have been given to rural households, thereby accelerating integration and development of nationwide markets. Output performance of agriculture has played an important role in curbing inflation since changes in food prices (led by rice) determine consumer price index developments and since rice accounts for 75-80% of consumer staples (IMF, 1996). As output increased more rapidly than population, per capita food production rose from 300,8 kg in 1986 to 372,8 kg in 1995.

The performance of an emerging private sector, largely through small-scale household enterprises which are imperfectly captured by official statistics, can also explain the positive real growth rates in Vietnam (*Table 3*): excluding agricultural activities, private businesses are mainly concentrated in services, handicrafts and light industries. In the years following Doi Moi, the development of the private sector has partly offset the dissolution of cooperatives bankrupted by financial difficulties: between 1989 and 1994, output of industrial cooperatives dropped by 30,9% per annum, while private sector output grew within the same period by 19,1% on average. Nevertheless, these statistics underestimate the real growth of the private sector: by 1994, this latter still accounted for only 26,5% of total industrial output in available statistics (22,1% were carried out by households).

⁵ Between 1989 and 1991, the importation and consumption of agricultural inputs were increased by 50% in spite of the disruption of CMEA trade.

Table 3: GDP structure and real growth rate in Vietnam (%)

	1987	1988	1989	1990	1991	1992	1993	1994	1995
GDP: (1)	3,6	5,9	8,5	5	6	8,6	8,1	8,8	9,5
state sector (1)	5,9	7,3	4,6	2,5	8,6	12,4	11,6	12,8	12,7
(1')	/	/	/	-7,7	3	8,8	11,7	13,6	/
(2)	35,8	32,5	33,2	32,5	33,3	36,2	39,2	40,2	42,3
non-state sector (1)	2,5	5,2	9,7	6,4	4,7	6,8	6,2	6,7	7,6
(2)	64,2	67,5	66,8	67,5	66,7	63,8	60,8	59,8	57,7
agriculture: (1)	-0,6	3,9	6,9	1,5	2,2	7,1	3,8	3,9	5,1
(2)	39,2	44,8	40,8	37,5	39,5	33	28,8	27,7	28,4
state sector (1)	13,1	8,5	-2,1	-22,9	2,1	1,7	6,3	6,3	7,8
(2)	4,7	3,4	3,3	3,3	2,7	2,6	2,6	2,7	4,7
non-state sector (1)	-1	3,7	7,2	2,3	2,2	7,3	3,7	3,8	5
(2)	95,3	96,6	96,7	96,7	97,3	97,4	97,4	97,3	95,3
industry: (1)	8,8	5,3	-2,6	2,9	8,7	13,5	12,8	13,6	13,9
(2)	29,7	25,5	24,2	23,9	24,8	28,2	30	30,7	30
state sector (1)	7,9	3,6	-4	5,4	10,4	18,6	14,7	14,5	14,5
(1')	/	/	/	-5,9	-1	10,1	14,7	17,1	/
(2)	61,3	60,3	60,1	60	61,4	62,8	63,7	63,3	67,7
non-state sector (1)	10,2	8,1	-0,4	-0,8	6	5	9,1	11,8	12,6
(2)	38,7	39,7	39,9	40	38,6	37,2	36,3	36,7	32,3
services: (1)	5,5	9,2	18,3	10,8	8,3	7	9,2	10,2	10,6
(2)	31,1	29,7	35	38,6	35,7	38,8	41,2	41,6	41,7
state sector (1)	3,3	11,2	13,8	2,1	7,4	7,5	8,8	11,3	11,1
(2)	50,7	52,7	49,4	44,2	47,5	45,5	46,9	48,1	51,3
non-state sector (1)	7,8	7,1	23	19,4	9	6,6	9,6	9,2	10,2
(2)	49,3	47,3	50,6	55,8	52,5	54,5	53,1	51,9	48,7

Source: World Bank

(1)= growth rate at 1989 prices; (1')= excluding oil; (2)= share at current prices

Among the supply-side factors, productivity gains have also supported real GDP growth: given the very low domestic investment rate, productivity and efficiency improvements contribute to a large part of output growth. In contrast to China (in which financial conditions were far better), Vietnam had no alternative in response to the withdrawal of Soviet support but to accelerate structural reforms and state-owned enterprises restructuring in the late 1980s.

Between 1989 and 1994, the number of state enterprises was reduced from 12 000 to about 6 000 and 970 000 workers were laid off⁶; accordingly, the current state sector accounts for only a small part of industrial employment (22%) and an even smaller part of production units (0,4%). As a result of impressive output gains and declining employment, average productivity in the state sector climbed steeply.

⁶ Within the state sector, the locally-managed state-owned enterprises fared worse relatively to the central ones: employment in such enterprises was reduced by half and 40% of production units were bankrupted. By 1993, the number of cooperatives also declined to 1/6th of the 1988 level.

The government's strategy in obliging the state-owned enterprises to pursue greater efficiency, profitability and more market-oriented behavior has consisted on two steps (Dollar, 1994). On one hand, the Government opened the domestic market to foreign trade and encouraged private enterprises in order to foster competitive pressures within the economy; at the same time, management autonomy replaced central plans to allow state-owned enterprises to compete with each other and with the private sector.

On the other hand, successive steps taken to harden budget constraints were introduced until 1992: elimination of all direct subsidies and unification of the exchange rate in 1989, end of the traditional flows of cheap credit from the former Soviet Union in 1989, input supplies at world prices after the collapse of the CMEA, removal of indirect subsidies with the abolition of specific lending rates differentiated by sectoral structure and with the raise of lending rates vis-à-vis deposit rates in 1992.

Overall, these sound efforts to rationalize the state sector have improved the productivity and the financial performance of the state enterprises: net contribution to the budget (transfers to minus transfers from the budget) thus improved from -0,6% of GDP in 1988 to 11,6% in 1994 (IMF, 1996). At the same time, the state sector's share in the overall recorded economy has increased markedly, and even more in industrial output (excluding oil) since 1992.

Observed data suggest that the main segments of the industrial sector that perform well are those in which state-owned enterprises are predominant: it concerns first heavy industries not directly linked to the reforms (oil and gas) or which presented excessive capacity after the coming onstream of large-scale investment projects previously financed by Soviet aid (power, cement, steel, fertilizers). But a number of resource-based or large-scale light industries have also expanded rapidly (cigarettes, food, building materials), owing to demand factors (spillover effects of income growth).

In other words, while state-owned enterprises have often been cited as impairing the performance of transition economies in Eastern Europe, Vietnam appears to be different: state industry has become the leading sector of current development and transition process as fast as restructuring policy strengthened its output performance.

	by economic sector		by ownership		
	1988	1994	1988	1994	
agriculture	72,7	73	government	4,7	3,5
industry	14,1	13,3	state enterprises	9,5	5,2
services	13,2	13,7	non-state sector	85,8	91,3

Source: IMF

The sectoral structure of employment and the proportion of population living in rural areas have contributed to alleviate social costs in Vietnamese transition: besides the fact that the country has a huge pool of labor to draw on, the vast majority of the population are employed outside the state and industrial sectors (*Table 4*). This means that, given

the preponderance of workers that had no direct financial connection with the state (subsidies, bank loans, social welfare transfers), it was easier to dismantle socialist organization and to replace it by market opportunities for employment in Vietnam than in Eastern Europe. The initial greater job mobility has contributed to reemploy labor shedding of public sector workers by the private sector, thereby spurring economic growth. In sum, contribution to output from the employment side have come from labor shifts from the state and agriculture sectors to industry and services activities led by the private sector.

This higher labor mobility has also been an important element in averting a fall in real aggregate demand, following the removal of consumption and price subsidies. The Vietnamese transition is particular in that key reforms were first implemented in vast rural areas (land reform, decollectivization), fostering a broad-based growth: as in China, a one-time jump in productivity enjoyed by the rural sector has improved the living standards of the bulk of population and, in turn, fed back into the economy by demand linkages (construction, retail trade, consumer goods).

Nevertheless, such induced investment and consumption opportunities were also supported by other policy measures: the legalization of foreign currency deposits and remittances from Vietnamese abroad on one side, the new opportunities for employment in private activities and the increased profitability of state-owned enterprises (as bonus and welfare funds are more tightly linked to enterprise performance) on the other side, have markedly improved levels of household income.

In other words, contribution to real GDP growth in Vietnam has come both from supply-side and demand-side factors, pushing the country into a virtuous circle at the early 1990s.

Table 5: Vietnamese exports and imports (US\$ millions)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Total exports	494	610	733	1320	1731	2042	2475	2850	3602	4617
% change	-0,4	22,4	21	80,2	31,1	17,9	21,2	15,2	26,4	28,2
Convertible area in %	62	71	63,4	74	72,6	99,1	100	100	100	100
Total imports	1121	1184	1412	1670	1772	2105	2535	3505	4643	6676
% change	24	5,6	23,6	18,3	6,1	18,8	20,4	38,3	32,5	43,8
Convertible area in %	40,4	39,3	42,7	59	68,2	87,7	100	100	100	100

Source: World Bank

At the same time, the above series of virtuous effects have assisted Vietnam's integration into the world economy and adjustment to the trade disruptions caused by the breakups of the CMEA and the Soviet Union. Furthermore, it seems that this external shock intensified a structural adjustment process that were already implemented: exchange rate reform following foreign trade decentralization in 1988, early approval of a Foreign Direct Investment (FDI) Law, substitution of domestic financing to the Soviet aid, diversification of trade towards the convertible currency area.

It's mostly on the import side that we can capture the major negative impact on growth

of the trade disruptions: break in supplies of raw materials, intermediate goods or machinery and equipment, cost-push effects with the cessation of terms-of-trade subsidies (as the previous trading arrangements defined very low import prices for Third-World socialist countries). However, the extent of the shock Vietnam suffered was alleviated by the small size of heavy industries, the relative low openness of the country and an already great share of external trade charged at world prices when the shock occurred (*Tables 5 and 6*). The favorable export performance on the other side, contributed to release the country's external balance constraint at the beginning of the transformation process: it resulted both from trading partners and exported goods diversification. While East Asian countries have replaced the former CMEA countries as major trading partners (75% of total exports and 85% of total imports), export promotion policy benefited initially from the emergence of new export opportunities directly marketed in the convertible area: coming onstream of oil projects, supply response of the primary sector to reforms (rice, coffee, marine products). Handicrafts and light industrial products, which relied heavily on the CMEA markets, have become a growing part of Vietnamese exports towards the convertible area (from 1,6% in 1990 to 22% in 1995).

In consequence, openness to trade and integration into the world economy have substantially supported the Vietnamese transition process: between 1990 and 1995, value of total exports has quadrupled, while the ratio $(X+M)/2GDP$ has reached 29,4%.

3. Explaining Divergence: from Variety of Socialism Patterns to Variety of Post-Socialist Experiences?

The Vietnamese performance in stabilization and growth illustrates the wide variation in the transition experiences across countries and across regions. This disparity has given rise to numerous comparative analyses, attempting to explain the underlying differences in economic performance. Following a first debate which stressed on the speed and intensity of reforms, the last propositions have been that:

1) initial conditions (ranging from economic and organizational structures to macroeconomic factors) could interact with reforms to produce different effects of similar economic policies. In this point of view, we consider that initial conditions are a mirror-image of various patterns of centrally planned economy that were implemented in the pre-transition period.

2) the disparity of early experiences illustrates the interaction between reform process and economic performance, as the outcomes on stabilization and growth can affect, in turn, the strategy and implementation of reform. In this point of view, we consider that there's a Vietnamese approach to design and implementation of policy reform; led by an explicit goal of transition to a « socialist market economy », this has involved a different process of institutional, structural and behavioral change.

3.1. Initial Conditions as Determinants of the Transition Outcomes?

In most of the comparative discussions which attempt to account for the wide variation in the transition experience across countries, differences in initial conditions have won widespread support. According to de Melo and Gelb (1996), these ones and their related pattern of sectoral repression are important determinants of the evolution of income distribution, which may interact with reforms to affect economic outcomes.

The first range of differences concerns economic structures. In contrast to the overindustrialized and old urbanized societies of Eastern Europe, Asian nations are characterized by a rural-based economy dominated by labour-intensive activities. Furthermore, their mode of production relies heavily on household-scale organization, contrasting with the socially organized state sector and its highly subsidized jobs in Eastern Europe (Sachs-Woo, 1994; Sachs, 1996). While the agriculture sector contributed to the bulk of the Vietnamese NMP and total employment in 1988 (*Table 6*), state farms accounted for only 2,1% of agricultural production (and 0,6% of production of paddy), so far from the large-scale and highly mechanized state farms of Eastern Europe⁷.

The low development of large-scale heavy industries and the less overbuilt state sector have also minimized supply rigidities in Vietnam. Hungary, which registered the most attempts at reform, still relied on a large state sector on the eve of the transition process: by 1989, it accounted for 65,2% of GDP and 70% of employment, against respectively 23,7% and 13,1% in Vietnam (Rana-Hamid, 1995). Furthermore, state enterprises in the South were more flexible and autonomous than those in Northern Vietnam: most of them were previous private firms, primarily operating at small-scale in light industries, that had been nationalized after the country reunification.

Table 6: Selected indicators on initial conditions in 1988 (in %)				
	<i>Czechoslovakia</i>	<i>Hungary</i>	<i>Poland</i>	<i>Vietnam</i>
Structure of Net Material Product				
agriculture	7,6	12	13,9	55,5
industry	59,8	39	49,1	24,6
construction	10,8	10	12,1	3,3
other material product	21,8	39	24,9	16,6
share of the state sector	97	85,4	85,3	21,4
Structure of industrial output				
light industry	20,8	38,9	/	53
heavy industry	79,2	61,1	/	47
Structure of external trade				
Eastern Europe* in % of exportations	73	44,6	40,7	36,6
Eastern Europe* in % of importations	72,6	43,7	40,6	57,3

Various sources

* including the former Soviet Union

In the same way, a general feature of the Vietnamese industry is the predominance of light industries and handicrafts, carried out by small-scale enterprises absorbing the bulk of labor force. This very fragmented industrial sector, operating at small-scale and with simpler technologies, have made easier the introduction of market forces and hard budget constraint in the state industrial sector. By the end of the 1980s, the latter

⁷ Poland was the sole exception to this rule since 15% of the agricultural labour force was independent peasant farmers. But even though, the latter depended on the state for substantial subsidies, inputs and for the sale of outputs.

averaged a number of 263 workers per firm⁸ in Vietnam, contrasting with the number of 503 in Hungary and 2684 in the former Czechoslovakia (Rana-Hamid, 1995).

So, the adjustment process to the breakups of CMEA and the former Soviet Union (in terms of energy resource or other input supplies) took less time in Vietnam than in the other transition economies, which adjusted with more difficulties by virtue of a higher capital intensity and a more extensive capital stock.

Within this framework (industrial structure and sectoral structure of employment), it was then easier to transfer workers from a labor-intensive agricultural sector towards legalized non-state industry and services, thereby unleashing rapid growth out of the Plan and contributing to stabilization programs. However, there is evidence that the demographic structure of the country has also made labor market more flexible. According to population data, 68% of Vietnamese age less than 30 years and the median age is low (about 20,2 years in 1989): a consequence of this youth-heavy population structure (reflecting the influence of wars) is a low rate of working population (about 40%). To sum up, as Sachs (1996) has suggested, the early reform successes in Vietnam have been achieved thanks to the existence of an ample supply of rural young labor, which has fueled the growth of a dynamic non-state sector. In contrast to Eastern Europe where a bulk of population has been subjected to sharp drops in living standards, here few people have lost in the reform process.

A second range of initial differences concerns the administrative and organizational structures: in particular, the weakness of central planning and the large decentralization of administrative apparatus due to historical reasons have given influential economic and political powers to localities (Tran, 1998).

In Vietnam, centrally planned system had never been really consolidated in both countries, because of an economic structure far less complicated and differentiated than those of Eastern Europe. So, industrial enterprises were rarely subject to a central Plan as were Soviet enterprises; similarly, economic planning covered only 100 products in Vietnam, whereas around 25 millions commodities entered in the Soviet plans (Sachs-Woo, 1994; UNDP, 1996). One has also justified the inefficiency of planning in Asian socialist countries by the low skills of the managerial staff, or information deficiencies. However, it is mostly the very large number of small-scale industrial enterprises in those countries that had prevented centralized planning from integrating a large part of economic activity.

A further complication is that, despite the extension of the Soviet model to the whole country, many elements of a market economy such as money, price and market behaviour, had lived on throughout the pretransition period (Rana-Hamid, 1995). This characteristic, coupled with a far less extended coverage of the Plan, has enabled a decentralized production to emerge spontaneously outside of the Plan.

Added to that, historical and political considerations also explain the devolution of revenue and expenditure responsibilities to local governments: regionalization of industry during the war era consisted of scattering industrial plants nationwide in order

⁸ Nevertheless, there was a regional disparity: in the North, state enterprises employed between 250 and 450 workers on average, while the bracket fell to 50-100 in the South.

to avoid the devastation of bombing. The attempt at local autonomy in the 1970s created also self-sufficient and integrated agro-industrial zones at the district level.

Such a regional decentralization had still lived on within the Soviet model: faced to a less firmly entrenched pattern of centrally directed allocation of resources through administrative means, central state shifted decision-making powers and accorded greater responsibilities to sub-national governments. While it was partly in response to the ineffective coordination through planning and to economic shortage, this option (by diverting a growing part of the economic activity from the planning process) exerted the opposite effect of eroding further the effectiveness of administrative control.

Many analysts have pointed the downturn in GDP and in industrial production throughout Eastern Europe as a result of initial conditions. However, in such comparative discussions where differences in both economic and organizational structures suggest so wide variation across countries, how to distinguish the results of structure from the results of reform?

The Czech and Slovak Republics, for example, are grouping as well-performing countries; but both have inherited from the former Czechoslovakia an overbuilt state sector which was largely predominant in all economic activities (including agriculture and retail trade), a bulk of external trade within the CMEA and the economic planning system the most rigid of the whole Eastern Europe. Other comparative discussions have then replaced structural differences by initial divergence in macroeconomic factors: countries that have managed to return rapidly to positive growth were initially subjected to low monetary overhang, few economic shortage, better performance of state enterprises, better fiscal balance and low debt ratio (Blejer and alii, 1993; IMF, 1995). Nevertheless, this consideration cannot explain Vietnam's successes in stabilization and growth, as the country was subjected to severe macroeconomic mismanagement between 1985 and 1988.

In order to clear the ground, De Melo and Gelb (1996) have measured the importance of initial conditions in the transition outcomes: in their econometric study, the growth equation includes geographical location and pre-reform share of industry in the GDP, whereas the size of initial monetary overhang relative to GDP is included in the inflation equation. Although the coefficients are associated with the expected signs, they are not significant, suggesting that the relationship holds broadly between reform policy and outcomes. In sum, initial conditions can be a mirror-image of different patterns of socialist organization or centrally planned economy on the eve of the transition process: but they do not determine totally its outcome.

3.2. The Asian Approach to Reform or How to Keep Pace with a Socialist Market Economy

Most of recent investigations on the transitional process have replaced the debate over the speed by the optimal timing and sequencing of policy reforms. As Sachs (1996) has argued, « *the essential differences is not really the speed of reforms per se, since certain kinds of radical reforms were undertaken with blinding speed in gradualist East Asia* » (p:18).

Rana-Hamid (1995) and Adams-Krkoska (1996) have defined a broadly "Asian" approach to sequencing policy reforms. Asian countries have started transition process

with most aspects of microeconomic measures (price, enterprise, market), then « climbed » up to macroeconomic reforms (fiscal, monetary, external trade and exchange regime). This sequencing was instrumental in developing relatively efficient commodity markets and quick supply responses by encouraging market-based enterprises to react to economic incentives. Furthermore, by establishing microeconomic foundations to market-oriented policies, it has enabled macroeconomic stabilization achievement.

This « bottom-up » approach has been effectively followed in Vietnam: firstly, most of early reforms consisted of experimentations at the grassroots level which created thereafter a consensus among the government for emulation by other parts of the country (Tran, 1998). The household responsibility system, for instance, was already implemented in some localities by 1979, even though it went contrary to central policy direction. Similarly, the province of Long An, later followed by others like An Giang in Mekong Delta, abolished in early 1980 the subsidy policy and opted definitively for a market-based price system. Finally, decentralization of trade administration through the establishment of local foreign trade corporations was emulated in 1981-82 when the central state recognized that a large part of external trade got away from administrative control. Without these illegal practices, there is evidence that market mechanisms could never have emerged so rapidly within the Vietnamese economy.

Secondly, Vietnam started its reform process at the bottom (household-based rural sector, vast economy of self-sufficiency), then extended it to the urban industrial state sector. Because agricultural production is characterized by labor-intensive technologies and by an equitable allocation of individual plots, rural liberalization and the introduction of the household responsibility system unleashed economy-wide adjustment and gave dramatic encouragement to the majority of the population. As rural reforms permitted large boosts to output, supply situation improved and population living under the poverty line dropped significantly from 75% in 1984 to 51% in 1994.

The earliest reforms also legitimized a private sector that lived on throughout the period since war ended: in 1979, this one (essentially small-scale private traders) accounted almost for 40% of NMP (Le Van and alii, 1998a). Along with recognition of the private sector, the state established free inter-provincial movement of commodities, liberalization of retail trade and some decentralization of foreign trade: all this process responded to a « privatization at the bottom », in contrast with the privatization of ownership.

At the same time, a « marketisation » process was introduced in the urban industrial sector: at 1981, state-owned enterprises were freed to operate outside of the central plan and on a market-basis for inputs and outputs through the triple-plan system. Supported by a dual-track pricing system similar to that employed in China, such an autonomy was designed to introduce price and cost sensitivity at the margin⁹.

By and large, this bottom approach has intensified domestic competition, encouraged the rebirth of a market economy that lived on despite forced collectivization and a dualism,

⁹ Beside the traditional socialist plan (plan A), two other plans established direct horizontal contacts and price negotiations after enterprises had fulfilled their obligations to the state. While the firm under plan B could dispose of products as it wished only to acquire additional inputs for its authorized product lines, there were no restrictions whatsoever under plan C: furthermore, the firm could diversify annex production and sell the new products at market-determined prices (Rana-Hamid, 1995).

where the socialist soft budget constraint enterprises coexisted with the newly liberalized hard budget enterprises (even within the state sector). However, an economic dualism (plan/market, soft/hard budget constraint) is only possible under official price controls in trade (MacKinnon, 1995). In the former centrally planned system, price controls obeyed to a double function: they were necessary to anchor the producer price level and to generate state revenue through financial surpluses collected from industrial enterprises. Thus, a too rapid price liberalization could have two results: on one hand, it would erode drastically state revenue, thereby stimulating excess money creation. On the other hand, industrial enterprises would use their monopoly power, as their budget constraints are still soft and there is not yet competition enough.

By retaining price controls, the Vietnamese authorities chose to peg the producer price level and thus to avoid a drastic collapse of output. Along with this option, the rapid growth outside of the state sector reduced gradually imperative plans and controlled prices, leading smoothly the country towards a market economy.

But while China began its liberalization without significantly repressed inflation, the « two-track » approach in Vietnam suffered from resource shortage: following the prospect of a rapid decline in the Soviet aid after 1986, the monetary overhang widened the price gap and thus, multiplied the tendency for supply diversion (transfers of scarce goods from the planned sector to the burgeoning market economy). This phenomenon in turn enlarged even more the price gap and contributed to either growing price subsidies from the central State or successive increases in administered prices, thereby giving rise to open inflation and macroeconomic imbalances.

Similarly, the granting of increased autonomy coupled with a soft budget constraint endowed the state enterprises with an automatic refinancing of cash-flow shortage through their monopolization of bank credit. By eroding public confidence in the banking system, this quasi-fiscal deficit launched a financial disintermediation process and money evasion.

Faced with an important budget deficit, a declining role of banks as financial intermediaries and huge inflation rates, the government was then forced in 1988 to extend the transition process to macroeconomic reforms: withdrawal of the centralized state subsidy system and government restructuring in order to reduce budget expenditures, monetary reforms aimed at mobilizing domestic resources on one side (two-tiered banking system which separated the functions of the State Bank and commercial banks, raise of interest rates) and exchange rate, trade and FDI reforms aimed at mobilizing external resources on the other side.

Such macroeconomic reforms were supplemented by an early structural adjustment, aimed initially at reducing trade dependency vis-à-vis of the ruble area. On one hand, a development of light industries could contribute to reduce imports of capital goods from Eastern countries; on the other hand, trade liberalization could facilitate a rapid reorientation of external trade towards the convertible area. Furthermore, distortions in relative prices were gradually eliminated by evaluating traded goods at the parallel exchange rate.

In sum, an optimal « synchronization » of macroeconomic reforms and structural adjustment contributed substantially to alleviate production costs from the CMEA trade

disruptions.

This bottom-up approach, coupled with initial conditions that provided the context for reform, are the pillars on which political leaders of the Asian transitional economies have built their « socialist market economy ». Such a combination has stimulated a broad-based growth, in that the vast majority of the population stands to benefit from the reforms; and even if there were losers (i.e. the public sector employees), the winners have tended to outnumber the losers by a wide margin. As de Melo and Gelb (1996) have suggested, to the extent that the former repressed sectors were intensive in relatively unskilled labor, reforms have tended to introduce an initial equalizing element into the overall distribution.

Asian countries have also rooted their pace of reform on the existing decentralized structure of political administration and social organization, in contrast with Eastern Europe where the reform approach involved « building the new by destroying the old ». In a certain manner, this approach has contributed to maintain socialist ownership in accordance with a market-based system: in the Vietnamese case for example, the state industrial sector is regaining its leading position as a driving force of industrialization process, following a short phase of restructuring.

All this goes to show that, by virtue of variety in initial conditions and final goals, transition experiences in Asia and Eastern Europe have involved variety of institutional, structural and behavioral change.

4. Conclusion

Within the debate over the speed of reforms during the early years of transition experiences, Vietnam has been assimilated to « shock therapy » market reform approach. However, the Vietnamese experience seems to be radical not on the reform options, but more on its results, which were rapid and decisive: total price liberalization coupled with a fall in inflation rates, exchange rate unification, end of the disintermediation process within a context of growing domestic saving mobilization, dynamic economic growth despite the two-track system removal.

Vietnam's successful macroeconomic performance cannot be summarized either by a gradual path in the speed of reform. The forced collectivization, for example, was effectively dismantled very quickly: but it was accompanied by a liberalization of the non-state sector, which has supported the household responsibility system simultaneously at upstream level (higher input availability) and at downstream level (better product marketing, development of consumer good industries). In the same way, the radical price liberalization in 1989 was only the ultimate step of early attempts to reduce the distortions between official and free-market prices, and to enlarge economic transactions at market-clearing prices.

The current Vietnamese success in macroeconomic stabilization and economic growth relies more heavily on a bottom-up approach, which aimed first at developing relatively efficient commodity markets and quick supply responses by encouraging market-based enterprises to react to economic incentives. It is only when microeconomic foundations to market-oriented policies were established, when economic agents got price and cost sensitivity that the transition process turned to macroeconomic imbalances.

The Vietnamese experience is somewhat a counterexample to the familiar argument developed in Eastern Europe that macroeconomic stabilization is a precondition for a successful liberalization of repressed sectors. As Portes (1995) has argued, it is possible to implement microeconomic reforms within an unstable macroeconomic environment. First, the strong open inflation characterizing the resource shortage in Vietnam has greatly facilitated the subsidies removal by making official prices increasingly irrelevant. Second, increased competition and development of liberalized sectors (agriculture, services, external trade) have released supply on good markets and then shifted the former sellers' market toward a buyers' market with market-clearing prices. In a sense, it is inversely real growth that has created preconditions to macroeconomic stabilization achievement in Vietnam.

Like any long-run process, transition sets the recurrent problem of optimal sequencing and, concerning the Vietnamese case, political leaders have resolved it by an « Asian-denominated pragmatism ». To a large extent, the early reforms in Vietnam proceeded without a well-defined blueprint and therefore, talking about a reform strategy would be abusive. As the reform process accelerated, the directives from above reflected uncertainty about the direction, order and speed of reform. The failure of currency, price and wage reforms in 1985, for example, illustrates this uncertainty regarding policy intentions.

The Vietnamese approach to transition was specifically a combination of spontaneous bottom-up reforms with pragmatic decisions into the higher realms of politics. By responding to the population claims, the transition process launched in 1986 has permitted the political leadership to gain public confidence in the economic area.

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Transformations on the Labour Market in Central Europe During the Systemic Transition: Inertia and Overturning

Ariane Pailhe

Introduction

According to the theory of labor market segmentation, wage disparities depend little on the variation in individual abilities and mainly on the position held as well as the structure of the labor market. Economic analyses relative to wage inequalities in Central Europe have seldom used the theory of labor market segmentation, particularly during the transition period. A few studies have been carried out on centrally planned economies. For instance, the analyses of D. Stark [1986] or S. Malle [1986] helped to conceptualize empirical studies produced by central European research workers, in particular Hungarian¹.

Whereas in a market economy the formation of internal markets² is a response to the uncertainty linked to the market itself, in the socialist economies it aimed to reduce systemic uncertainty caused by administrative regulation. Firms had to keep on a reserve stock of manpower in order to deal with sudden increases in production. In a context of constant labor shortage, firms tried to hoard workers, particularly the most qualified, and so internal markets were formed. However, firms tried to make labor more flexible within their different establishments by modifying work rates and dividing positions in order to deal more effectively with the unforeseeable problems of input delivery³. Firms had every reason to offer qualified workers attractive payment, benefits in kind and/or promotion perspectives. Directors in planned economies disposed of a certain margin for

¹ NAGY G. & SZIRACZKI G., 1984 ; CUKOR E. & KERTESI G., 1985, 1988 ; KERTESI G., SZIRACZKI G., 1988.

² The internal market is different from a competitive labor market ; it can be defined as “an administrative unit, such as a manufacturing plant, within which the pricing and allocation of labor is governed by a set of administrative rules and procedures”. [P. DOERINGER, M. PIRELLA, 1971, p.1].

³ Flexibility was even institutionalized in Hungary in 1982 by the legal instigation of the VGMK, teams of autonomous workers employed through sub-contracts. These teams of workers made contracts with their firms to carry out specific tasks, such as installing new equipment, doing non-routine maintenance and carrying out specialized work. They were allowed to use the firm's equipment and supplies to do this work. Their creation was intended to allocate work in a more efficient manner, increase productivity and workmanship while diverting workers from parallel activities, often carried out in the workplace. The remuneration of VGMK members was not included in the wage fund, but negotiated with the directors; earnings were roughly four times higher than the average wage in the industry [D. STARK, 1986]. This type of organization was very successful; in 1982 there were 3531 associations, 21 490 in 1986, falling back to 16 978 in 1988. A similar sort of workers' association was introduced in Poland in 1984, but it did not encounter the same success.

maneuvering as far as fixing wages within their establishments was concerned, even if central government did control the global pay packet. These factors all contributed to the formation of a highly structured internal market.

On the macro-economic level, the primary segment presents the same characteristic as a firm or an establishment's internal market; it is formed by a series of internal markets. In this way, it is made up of the most stable and best-remunerated posts, and those offering the best work conditions and the best promotion possibilities. Labor turnover is, of course, lowest in these posts. The primary segments thus groups together the posts with superior status. The secondary segment is defined by opposition to the primary segment. In the countries of Central Europe, the State intervened in the structuring of the labor market; the central authorities tried to encourage strategic sectors in order to help firms fulfill the goals set by the plan. The upper segments were formed by large firms and priority sectors, such as mining, mechanical and military industries, constituting poles of attraction for labor and subsidy. Firms in these sectors also took advantage of their power to negotiate high salaries with the Ministry in charge of their branch. Segmentation thus varied depending on the branch and sector concerned.

Systemic transition led to deep changes in the labor market, altering mechanisms engendered by labor market segmentation as it existed in the command economy. Radical institutional changes affect the market for firms' products, as well as their technological levels, their size and their methods of wage determination. Furthermore, the leap has been made from shortage economies to economies obliged to obey the laws of supply and demand. Sector transformations, as well as an increased flexibility of labor, can thus cause certain firms and/or branches of the primary segment to shrink.

Using an estimation based on a two regimes model we intend to show that labor market segmentation has continued to exist in Central Europe throughout the period of systemic change. In the following pages, we will determine the characteristics of the labor market's different segments. Then we will explain how these segments came into being.

1. Model Specification and Data Description

A test proposed by W. Dickens and K Lang [1985] and taken up by M. Glaude [1986] makes it possible to test labor market segmentation and calculate the probability of working on each segment. According to this method, the chances of an individual belonging to a certain segment are not calculated *a priori* (in advance), but are based on an estimation by the model. The affectation of an individual depends not on one or two criteria but on several. The two regimes model can be expressed as follows:

$$\ln w_i = \begin{cases} X_i \beta_p + \varepsilon_{pi} & \text{si } y^* = Z_i \Gamma + \varepsilon_{wi} > 0 \\ X_i \beta_s + \varepsilon_{si} & \text{si } y^* = Z_i \Gamma + \varepsilon_{wi} \leq 0 \end{cases} \quad (1)$$

w_i is the person i 's wage, X and Z are the vectors of explicate variables, β_p , β_s , and Γ are the vectors of estimated parameters. The marks p and s refer to primary sector and secondary sector respectively. y^* is the latent variable which measures an individual's tendency to be in the primary sector. ε_{pi} , ε_{si} and ε_{wi} are the terms of errors presumed to be

normal. The two wage equations (equations with \mathcal{X}) and the switching equations are estimated simultaneously. The model's likelihood function is:

$$\Pr(\varepsilon_{wi} > -Z_i\Gamma / Z_i, X_i, \varepsilon_{pi}) \cdot f(\varepsilon_{pi}) + \Pr(\varepsilon_{wi} \leq -Z_i\Gamma / Z_i, X_i, \varepsilon_{si}) \cdot f(\varepsilon_{si}) \quad (2)$$

Where $f(\cdot)$ is a density function for the errors ε_p or ε_s . The log-likelihood function is thus:

$$\sum \ln \left\{ \left[1 - \Phi \left(\frac{-Z_i\Gamma - \frac{\sigma_{pw}}{\sigma_{pp}} \varepsilon_{pi}}{\sqrt{1 - \frac{\sigma_{pw}^2}{\sigma_{pp}^2}}} \right) \right] \cdot \varphi(\varepsilon_{pi}, \varepsilon_{pp}) + \Phi \left(\frac{-Z_i\Gamma - \frac{\sigma_{sw}}{\sigma_{ss}} \varepsilon_{si}}{\sqrt{1 - \frac{\sigma_{sw}^2}{\sigma_{ss}^2}}} \right) \cdot \varphi(\varepsilon_{si}, \varepsilon_{ss}) \right\} \quad (3)$$

$\varphi(\cdot)$ and $\Phi(\cdot)$ are respectively the density and cumulative functions of the normal law, σ_{pp}^2 and σ_{ss}^2 are the variances for ε_p and ε_s , σ_{ww}^2 is normalized and equal to 1. σ_{pw} and σ_{sw} are the covariances of ε_p and ε_w and of ε_p and ε_w .

In order to carry out this test, we used a maximum likelihood program with complete information on STATA⁴ software. The program was applied to data from the 1993 Social Stratification Survey.

We have retained several specifications of the switching equation and the wage equations. The variables chosen to determine the affectation of an individual to one or the other segment are the number of years of education (*NBREDUC*), the worker's sex and the region of residence. The two last variables are dummy variables, the first establishes whether the individual is a woman (*WOMAN*), the second whether he or she lives in the capital (in the Central region in Poland). We have also retained professional variables: the sector of activity and the type of ownership under which the establishment falls (model 1). The managerial position and the worker's occupational class categories were added to these variables in a second specification of the model (model 2).

The wage equations' variables are the number of years of education, professional experience (*EXP*) and tenure in the establishment (*TENURE*). This allows us to measure the return of initial training, for general and specific qualifications. In a third specification of the model (model 3), we retained managerial position, the type of ownership of the establishment and the region of residence in the earnings function; the variables of the switching equation being those of model 2. This last model could only be tested for the Czech Republic and Hungary due to the insufficient number of individuals in others samples.

⁴ I would like to thank Christine Siegwath Meyer, assistant Professor in the Department of Economics at Bentley University for having sent me examples of this program that she has written in collaboration with STATA Corporation.

Box 1: The data

The data come from the Social Stratification Survey in Eastern Europe⁵. This survey was part of an international research project coordinated by the Institute for Research in Social Sciences at the University of California, carried out in 1993 in nine Eastern European countries, in Holland and in the United States. The survey provides information concerning income collected in 1992, goods, housing, lifestyle, political participation and opinions. It also offers a retrospective view of the activity and education of the interviewee and his or her family. We extracted from these original samples the people in employment during the period of income declaration. We have limited our study to the wage-earning population from this group, the income of independent workers being likely to be under-estimated for fiscal reasons. We have also eliminated the sample of people working part-time, being as they represent a majority of women. The samples retained count 2895 cases for the Czech Republic, 1868 for Hungary, 1848 for Slovakia and 1214 for Poland. Annex A.1 indicates the definitions of the variables used and annexes A.2 gives descriptives statistics for each variable for each of our samples.

The test results reveal the pertinence of an analysis in terms of labor market segmentation.

2. A Segmented Labour Market

The estimation results for a single labour market (OLS) and for a dual market (models 1, 2 and 3) are presented in tables 3 to 5. We will first show that there are in fact two differentiated segments on the labour markets of Central Europe. We will then study the characteristic which favour the entry onto the first segment before analysing the return gained from different qualifications on each segment.

2.1. Two Differentiated Segments

For each of the specifications retained, and in each country, the two regimes model is judged more adequate than a single wage equation for the entire population.

To establish the superiority of the two regimes model over the single wage equation we use a likelihood ratio test. To do this, twice the difference between the log-likelihood of the two-regimes model and the OLS [$2(L^*-L)$] is compared with a χ^2 with n degrees of freedom, n being equal to the sum of the number of constraints and of the number of unidentified parameters (Monte Carlo test).

Table 1. Likelihood Ratio Test

	<i>Hungary</i>			<i>Czech Republic</i>			<i>Poland</i>		<i>Slovakia</i>	
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 1	Model 2
$2(L^*-L)$	134	381	334	1100	296	460	390	397	220	803
n	15	18	22	16	19	22	17	20	16	18
χ_n^2 at	30,6	34,8	40,3	32,0	36,2	40,3	33,4	37,6	32,0	34,8
99%										

⁵ I would like to thank Jiri Vecernik, research worker at the Institute of Sociology at the Czech Academy of Sciences for giving me access to this data.

A single labor market model (OLS) can, thus, be rejected with 99% accuracy; two wage equations give a better representation of the labor market than one.

2.2. Factors Contributing to the Adherence to the Primary Segment

The probability that a worker i works on the primary segment, given his wage and his personal characteristic, is:

$$\Pr_{prim} = \frac{\Pr(\varepsilon_{wi} > -Z_i\Gamma / Z_i, X_i, \varepsilon_{pi}) \cdot f(\varepsilon_{pi})}{\Pr(\varepsilon_{wi} > -Z_i\Gamma / Z_i, X_i, \varepsilon_{pi}) \cdot f(\varepsilon_{pi}) + \Pr(\varepsilon_{wi} \leq -Z_i\Gamma / Z_i, X_i, \varepsilon_{si}) \cdot f(\varepsilon_{si})}$$

(4)

The probability of workers from a certain category belonging to the primary segment is estimated by calculating the average probability of working on the primary segment for all workers holding the same characteristic. Table 2 presents the probabilities of belonging to the primary segment for the different categories of workers.

The probability of belonging to the primary segment is relatively low since it does not surpass 25% for any of the countries studied; the probability is higher for men, particularly in Poland and Slovakia. In Hungary, the probability of working on this segment reaches 29% for men and 20% for women. These figures attain respectively 32% and 20% in Poland, 21% and 16% in the Czech Republic and 30% and 20% in Slovakia. In the same manner, living in the region surrounding the country’s capital or holding a diploma of higher education always helps adherence to the primary segment. People with technical training also have a higher probability of working on this segment, except in Poland, where only workers with professional training have a chance of reaching this level. People with secondary school diplomas also have a greater probability in ex-Czechoslovakia.

Experience acquired before entering the establishment increases the probability of belonging to the primary segment, particularly in Hungary where those with over 10 years experience have a 27% chance of working there as opposed to 22% for those with less than 5 years’ experience (model 1). Workers with a greater number of general qualifications have, therefore, more chance of working on the primary segment. The divergences are, however, rather slim, especially in Poland.

On the other hand, seniority in the firm does not increase the likelihood of belonging to the primary segment. The probabilities vary little in function of the number of years of tenure, and are much higher, whichever the country, for workers newly arrived in the establishment (models 1 and 2). Only with the third specification in the Czech Republic do workers with at least 15 years’ seniority have a slightly higher probability of belonging to the primary segment.

This result seems to go against the tenets of the theory. But this contradiction is only apparent, not real, reflecting the impact of systemic transition; the most qualified workers are those who have easily found work opportunities in better paid, alternative employment, especially in the new private sector. The growth in labor mobility is typical of the mutation period, during which employment stability is not a characteristic of the primary segment.

Table 2. Probability of Belonging to the Primary Segment for Different Categories of Workers (in %)

	<i>Hungary</i>			<i>Czech Republic</i>			<i>Poland</i>		<i>Slovakia</i>	
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 1	Model 2
Total	25	22	20	19	24	28	26	18	27	25
Men	29	26	23	21	25	32	30	21	32	30
Women	20	18	17	16	23	24	20	13	20	19
Capital	39	35	23	27	42	35	85	32	37	34
Tenure										
Less than 1 year	26	24	21	22	27	28	32	21	30	29
From 1 to 5 years	26	24	22	20	26	29	31	20	22	25
From 5 to 10 years	22	21	19	16	22	27	21	15	29	27
From 10 to 15 years	23	21	18	16	21	28	25	16	22	20
15 years and more	23	21	19	17	22	29	24	17	27	21
Experience at entry in the establishment										
Less than 5 years	22	20	19	17	20	27	25	16	27	24
From 5 to 10 years	23	20	18	19	24	29	25	18	26	23
10 years and more	27	25	22	19	27	29	29	19	28	26
Education level										
Tertiary education	29	31	29	24	31	31	30	20	28	25
Secondary general school	21	20	18	20	31	31	28	20	24	22
Secondary technical school	27	23	20	20	29	31	28	18	26	24
Incomplete secondary school	27	22	17	16	19	24	28	16	24	23
Primary	24	21	20	15	22	28	26	17	23	21
Apprentice training	23	20	18	17	19	26	23	17	31	29
Status										
Manager (10 persons and more)	47	51	45	22	47	31	36	34	45	48
Manager (1-9 persons)	34	33	31	22	37	31	33	21	31	32
Subordinate	22	19	17	18	20	27	24	15	24	21
Type of ownership										
State-run establishment	21	21	19	16	22	28	25	17	23	22
Foreign establishment	44	39	35	33	49	43	56	39	67	63
Privatized establishment	38	29	24	24	24	21	33	21	43	39
Private establishment	32	27	24	28	38	34	43	26	40	35
Branch										
Construction	35	25	23	23	38	46	38	25	19	18
Transports and communications	26	24	22	21	18	29	23	19	20	20
Retail trade, catering	26	25	23	23	26	21	22	14	28	25
Education, health, social services	11	13	13	14	17	20	19	13	10	09
Finance	59	45	33	44	58	59	93	61	63	57
Mines, energy	63	47	25	27	34	51	49	29	71	70
Agriculture	15	18	20	13	13	18	17	15	21	19
Industry	27	23	20	14	18	23	23	15	27	20
Administration, police	23	25	23	20	42	41	60	30	25	27
Other	26	24	22	21	26	27	25	17	23	21
Occupational class categories										
Higher-grade professionals, administrators, and officials	40	48	45	26	41	40	35	22	39	38
Lower-grade professionals, administrators, and officials	19	17	15	18	24	28	27	18	25	22
Non manual employees	21	19	17	20	26	26	25	16	22	19
Skilled manual workers	25	20	18	17	21	30	25	17	25	23
Semi- and unskilled manual workers	24	22	20	16	17	25	24	16	29	28

The type of ownership under which the establishment falls plays an important role in the chances of belonging to the primary segment. In this way, workers in private firms are favored. The probability is particularly high for workers in foreign firms, especially in Poland and Slovakia. While in Poland and Hungary workers from recently privatized firms have more chance of belonging to the primary segment than those in newly created private firms, the opposite can be observed in the Czech Republic and Slovakia. These results illustrate the role of the type of privatization chosen as well as the restructuring undertaken.

Nevertheless, the probability of belonging to the primary segment varies greatly with the worker's sector of activity. For instance, workers in the mines and in finance have a good chance of belonging to this segment in all four countries, whereas workers from the agricultural sector, education, health and social services have little chance of reaching this level. Administrative workers and those in the police and in construction – other than in Poland – also have a high probability of belonging to the primary segment, as do those in transportation in Hungary and in other service sectors in Hungary and Slovakia. Workers from the sales sector and restaurants in Hungary and the Czech Republic also have a relatively high probability of working on the primary segment.

So it appears that the branches which bring together the most highly structured internal markets are both the former priority branches (such as mines and energy) and some activities of the service sector, enjoying a period of rapid growth throughout systemic change (such as finance)⁶.

The chances of working on the top layer of the labor market also vary with the post occupied and the managerial position. Chances are higher for workers directing other workers, especially in Hungary and Poland and for senior executives. The chances are also relatively high for junior executives in ex-Czechoslovakia, but also for employees and skilled workers in the Czech Republic (respectively model 2 and 3), and for unskilled workers in Hungary, but particularly in Poland. This result reveals that unskilled workers in Poland dispose of a relatively privileged position with regards to their qualifications. The influence of workers councils within firms in this country is clear.

It therefore seems that whichever specification is retained, the chances of working on the primary segment depend firstly on the managerial position attained, the firm's ownership characteristics and the sector of activity. Due to systemic changes, professional experience and seniority, on the other hand, play the opposite role to that advanced by the theory. It is also clear that the level of education has a fairly negative effect. Lastly, women have less chance of belonging to the primary segment; sexual discrimination manifesting itself through segregation.

2.3 Distinct Wage Structures

Wage structures differ from one segment to the other, particularly with regard to the return of general and specific qualifications. Similarly, sexual discrimination does not attain the same dimensions on each segment.

The primary segment places more importance on general qualifications than the secondary segment. Thus, in Hungary, Poland and Slovakia the return of education and total experience is higher on the primary segment, whatever the specification retained. For example, the return of one supplementary year of schooling reaches respectively 7,4%, 9,5% and 4,8% on the primary segment, as opposed to 5,6%, 5,0% and 4,2% on the secondary segment (model 1). The difference between the two levels for the return of

⁶ The example of retail trade and restaurants is more paradoxical. It is hard to believe that these branches form highly structured internal markets, being by nature highly competitive and made up mainly of small establishments. This incompatibility underlines the limits of our analysis, which does not focus on wages and does not take into account career profiles or work conditions.

education is particularly pronounced in Poland. The same holds for experience in Poland where the return is three times higher on the primary segment.

In the Czech Republic, the return of education is only higher on the primary segment if managerial position is incorporated into the switching equation (model 2). The experience coefficient is never significant for the primary segment, whereas it is significantly positive for the secondary segment with the first specification.

Table 3. Estimations of a Two-Regimes Model on the Set of Hungarian Employees

	OLS	<i>Model 1</i>			<i>Model 2</i>		
		Primary segment	Secondary segment	Switching equation	Primary segment	Secondary segment	Switching equation
Constant	8,974** (193,7)	9,156** (81,9)	8,879** (199,7)	-0,180 (-0,6)	9,009** (50,4)	8,979** (168,3)	-0,627** (-3,9)
Woman	-0,203** (-11,9)	-0,184** (-3,6)	-0,172** (-10,3)	-0,118 (-0,9)	-0,095 (-1,4)	-0,207** (-10,5)	0,038 (0,7)
Education	0,062** (23,4)	0,074** (11,5)	0,056** (22,1)	-0,016 (-0,9)	0,072** (7,8)	0,055** (17,0)	-0,038** (-4,1)
Experience	0,008** (8,1)	0,008** (4,2)	0,006** (7,6)		0,010** (2,6)	0,004** (5,6)	
Tenure	-0,001 (-0,5)	-0,001 (-0,3)	0,00**2 (2,0)		-0,004 (-0,8)	0,004** (3,5)	
Budapest				0,240** (2,3)			0,330** (6,3)
State-run establishment				-0,213** (-2,1)			0,015 (0,3)
Mines, energy				0,910** (3,5)			0,665** (7,8)
Finance				0,829** (3,0)			0,446** (5,3)
Industry				0,250** (2,5)			0,087* (1,7)
Construction				0,378** (2,0)			0,083 (1,2)
Manager (10 persons & +)							0,417** (6,5)
Manager (1 to 9 persons)							0,266** (3,8)
Senior executive							0,591** (7,9)
Standard deviation of error	0,37 61,1	0,28 26,9	0,22 38,2	1	,5199093 22,3	,2873413 39,7	1
Log-likelihood	L = -778	L = -711			L = -397		

* with 90% accuracy ; ** with 95% accuracy, () Student t , $N=1868$

Whereas the variable coefficient measuring seniority is significantly positive for the secondary segment, it is never significant for the primary segment, whichever the country under consideration; it even takes on a negative sign. So it appears that employment positions on the primary segment belong either to newly created firms or to establishments giving priority to new entrants on the labor market during the hiring process. Consequently, seniority has no significant effect on wages. On the other hand, general qualifications significantly increase wages on the first segment, in far greater proportions than on the second. Specific qualifications play an important role on wages on the secondary segment.

Table 4. Estimations of a Two-Regimes Model on the Set of Polish Employees

	OLS	<i>Model 1</i>			<i>Model 2</i>		
		Primary segment	Secondary segment	Switching equation	Primary segment	Secondary segment	Switching equation
Constant	7,700** (117,9)	7,660** (47,5)	7,652** (132,6)	-0,127 (-0,3)	7,683** (40,4) -0,369** (-6,2) 0,096** (8,2) 0,016** (5,2) 0,0001 (0,0)	7,642** (126,8) -0,246** (-12,0) 0,049** (13,4) 0,007** (5,0) 0,002 (1,5)	-0,087 (-0,3) -0,081** (-2,0) -0,036** (-2,0)
Woman	-0,326** (-14,0)	-0,373** (-6,2)	-0,241** (-11,8)	-0,127 (-1,1)			
Education	0,059** (14,9)	0,095** (9,2)	0,050** (14,8)	-0,025 (-1,1)			
Experience	0,010** (6,6)	0,017** (5,6)	0,006** (5,1)				
Tenure	-0,0001 (-0,3)	-0,0001 (-0,1)	0,001 (0,7)				
center				0,238* (1,8)			0,274* (1,6) -0,352** (-2,1) 0,641** (24,5) 0,536** (17,3) -0,129** (-3,5) -0,118 (-0,1) 0,073 (0,2) 0,063 (0,1) 0,402** (4,5) 0,141* (1,7) -0,180* (-1,6)
State-run establishment				-0,325** (-5,6)			
Mines, energy				0,698** (26,1)			
Finance				0,624** (2,2)			
Industry				0,126 (0,6)			
Construction				-0,108 (-1,1)			
Administration, police				0,048 (0,3)			
Transport				0,062 (1,5)			
Manager (10 persons & +)							
Manager (1 to 9 persons)							
Senior executive							
Standard deviation of error	0,40 49,3	0,36 17,6	0,30	1	0,36 13,9	0,31	1
Log-likelihood	L = -624,6	L = -429,7			L = -426,0		

* with 90% accuracy ;

** with 95% accuracy;

() Student t ; $N = 1214$

Table 5. Estimations of a two-regimes model on the set of Czech employees

	OLS	<i>Model 1</i>			<i>Model 2</i>		
		Primary segment	Secondary segment	Switching equation	Primary segment	Secondary segment	Switching equation
Constant	7,926** (186,5)	8,063** (47,2) -0,085 (-1,5) 0,040** (4,1) -0,002 (-0,6) 0,002 (0,7)	7,863** (170,0) -0,279** (-18,8) 0,052** (18,2) 0,003** (5,5) 0,001 (1,3)	-0,866** (-7,2) 0,022 (0,5) 0,005 (0,8)	8,236** (28,1) -0,307** (-3,9) 0,063** (4,7) 0,001 (0,6) -0,004* (-1,7)	7,894** (87,3) -0,272** (-9,2) 0,046** (14,7) 0,001 (0,9) 0,005** (4,0)	-0,842 (-0,8) 0,141 (0,5) -0,014 (-0,3)
Woman	-0,261** (-20,1)						
Education	0,052** (21,8)						
Experience	0,002** (3,2)						
Tenure	0,000 (0,2)						
Prague				0,197** (4,9)			0,454** (4,4) -0,245** (-2,2) 0,223 (1,1) -0,109 (-1,0) 0,860** (3,3) 0,462** (2,8) -0,364* (-1,8)
State-run establishment				-0,243** (-4,9)			
Mines, energy				0,393** (7,7)			
Industry				0,014 (0,4)			
Finance				0,535* (1,6)			
Construction				0,165* (1,7)			
Transport				0,248** (20,2)			
Manager (10 persons & +)							0,599** (3,3)
Manager (1 to 9 persons)							0,298** (2,1)
Senior executive							0,144 (1,0)
Standard deviation of error	0,343 76,1	0,555 28,6	0,278	1	0,322 31,6	0,240 20,4	1
Log-likelihood	L = -1011,4	L = -461,3			L = -863,2		

* with 90% accuracy
N = 2895

** with 95% accuracy

() Student *t*.

Table 6. Estimations of a Two-Regimes Model on the Set of Slovak Employees

	OLS	<i>Model 1</i>			<i>Model 2</i>		
		Primary segment	Secondary segment	Switching equation	Primary segment	Secondary segment	Switching equation
Constant	7,949** (159,4)	8,109** (65,9) -0,205** (-3,6) 0,048** (6,2) 0,004* (1,8) -0,002 (-0,8)	7,857** (148,9) -0,244** (-16,6) 0,042** (15,7) 0,003** (3,1) 0,002** (2,0)	-0,152 (-0,4) -0,165 (-1,0) -0,012 (-0,5)	8,214** (31,4) -0,211** (-2,1) 0,046** (2,7) 0,002 (0,3) -0,010* (-1,7)	7,872** (162,1) -0,256** (-17,6) 0,045** (16,2) 0,004** (3,3) 0,000 (-0,1)	-0,177
Woman	-0,274** (-18,0)						-0,163* (-1,7) -0,041** (-3,8)
Education	0,045** (16,3)						
Experience	0,005** (4,7)						
Tenure	-0,002* (-1,9)						
Bratislava				1,118** (4,1)			0,676** (2,4) -0,207** (-2,6) 0,289 (0,8) 1,488** (5,5) 0,237** (2,3) 0,355* (1,6) 0,323** (3,3)
State-run establishment				-0,243* (-1,8)			
Mines, energy				0,612** (2,9)			
Finance				1,270* (1,6)			
Construction				0,325* (1,9)			
Administration, police				0,774** (3,2)			
Transport				0,091 (0,5)			
Manager (10 persons & +)							0,424 (1,5)
Manager (1 to 9 persons)							0,117 (1,0)
Standard deviation of error	0,32 60,8	0,29 30,1	0,20 36,6	1	0,55 17,0	0,23 37,2	
Log-likelihood	L = -489		L = -379			L = -88	

* with 90% accuracy
N = 1848

** with 95% accuracy

() Student *t*

The introduction of managerial variables, both in the switching equation and the earnings function (model 3), does not modify the relative importance of the returns of education and experience on the two segments in Hungary and in the Czech Republic. On the other hand, seniority seems to have a significantly positive effect on wages in the primary segment in the Czech Republic.

Working in a state-run establishment rather than a private one has a greater negative impact in the primary segment of the two countries, whereas living in the capital is more advantageous for workers in the primary segment in Hungary and the secondary in the Czech Republic. It therefore seems that the best posts in the secondary segment are concentrated in the capital in this country.

Lastly, managerial position is better recompensed on the two countries' primary segment. An employee overseeing 10 or more people in Hungary earns 42% more than the subordinate on the first segment, in comparison with 29% more on the second. These numbers reach, respectively, 27% and 6% in the Czech Republic. It thus seems that status is given greater value on the market's first segment.

Table 7. Estimations of a Two-Regimes Model for All Employees (model 3)

	<i>Hungary</i>				<i>Czech Republic</i>			
	OLS	Primary segment	Secondary segment	Switching equation	OLS	Primary segment	Secondary segment	Switching equation
Woman	-0,181** (-11,0)	-0,136 (-1,3)	-0,166** (-11,7)	-0,111 (-0,3)	-0,249** (-19,6)	-0,208** (-9,3)	-0,231** (-7,6)	-0,169** (-2,2)
Education	0,051** (18,7)	0,057** (4,5)	0,048** (20,2)	-0,018 (-0,4)	0,042** (16,7)	0,036** (8,5)	0,048** (6,4)	0,030* (1,9)
Experience	0,006** (5,9)	0,008** (2,4)	0,006** (7,0)		0,0001 (0,3)	-0,001 (-1,5)	0,007** (3,3)	
Tenure	0,002* (1,6)	0,001 (0,2)	0,003** (2,4)					
capital	0,148** (7,0)	0,165** (2,4)	0,133** (7,3)	-0,033 (-0,2)	0,131** (8,7)	0,094** (3,5)	0,135** (2,4)	0,166* (1,7)
State-run establishment	-0,058** (-2,8)	-0,117 (-1,4)	-0,016 (-0,9)	-0,057 (-0,2)	-0,077** (-4,6)	-0,098** (-3,4)	0,035 (1,0)	-0,084 (-0,8)
Mines, energy				0,230** (2,6)				0,446** (2,9)
Finance				0,935** (4,9)				3,754 (0,2)
Industry				-0,153 (-0,4)				-0,002 (0,0)
Construction				-0,131 (-0,5)				0,252** (2,0)
Transport								0,164 (1,5)
Manager (10 persons & +)	0,325** (9,3)	0,416** (2,6)	0,292** (9,8)	-0,052 (-0,1)	0,225** (8,2) 0,137** (7,0)	0,274** (5,3) 0,151** (4,3)	0,065 (0,9)	-0,021 (-0,1)
Manager (1 to 9 persons)	0,173** (5,4)	0,257* (1,6)	0,162** (5,8)	-0,086 (-0,1)			0,037 (0,6)	0,029 (0,2)
Senior executive				0,074 (0,2)				
Constant	9,083** (197,3)	9,330** (67,5)	9,000** (210,2)	-0,284 (-1,5)	8,064** (189,5)	8,238** (117,3)	7,631** (62,4)	0,605** (2,3)
Standard deviation of error	0,35 61,1	0,38 12,3	0,25	1	0,33 76,1	0,38 51,1	0,15 12,4	1
Log-likelihood	L = -699		L = -365		L = -913		L = -683	

* with 90% accuracy;
Student *t*.

** with 95% accuracy;

()

It would appear that general qualifications are given greater value on the primary segment whereas specific qualifications are preferred on the secondary segment, except in the Czech Republic.

By measuring discrimination against women by the coefficient of the *WOMAN* variable, it appears that even if discrimination penetrates the two market segments, it attains different levels depending on the country under consideration. It is always higher on the primary segment in Poland and lower on the secondary segment in Slovakia. In Hungary, it is higher on the primary segment when the variables relative to managerial position are not introduced into the switching equation. Discrimination is by and large lower on the primary segment when these variables are taken into account. The opposite tendency can be observed in the Czech Republic. So, discrimination is high for managers observed in the Czech Republic, and reciprocally in Hungary. In Hungary and the Czech Republic, if managerial position is taken into account in both the switching equation and the earnings function, sexual discrimination is higher on the secondary segment. It therefore seems that given identical status, women encounter less discrimination on the market's top level.

Sexual discrimination impregnates both segments of the labor market. It manifests itself through lower wages for women, given identical qualifications, and by differing allocations to the two sectors depending on sex.

These results illustrate the specific characteristics of labor market partitions in economies undergoing systemic transition; the primary segment is able to attract the most qualified workers whereas the secondary segment conserves the least mobile workers and valorizes seniority.

3. Mechanisms Leading to Segmentation

Labor administration practices have been profoundly modified during systemic mutation, particularly due to the hardening of budget constraints, the increase in unemployment and the growth of a small but dynamic private sector. Motives for forming internal markets have also changed over this period. Workers now have more reason to want to belong to an internal market whereas employers are less likely to want to see one formed. However, the motives for constituting an internal market vary from firm to firm, depending, in particular, on economic performance and ownership type.

We have shown that the primary segment covers both the firms belonging to the socialist period's primary segment and firms undergoing expansion in certain service sectors.

It thus seems that habit helps to maintain highly structured internal markets in sectors which are to-day in decline. Uncertainty is so all-encompassing during the transition period that agents protect themselves by hanging on to old customs. Institutional and legislative changes, structural evolutions and economic fluctuations have perturbed the internal coherence reached during the socialist period. Firms' provisioning circuits remain uncertain due to the break in relations with former Comecon suppliers, companies' financial difficulties and the risk of seeing partners go into bankruptcy.

Bumpy production rhythms have not totally disappeared and a certain amount of labor

hoarding still seems necessary in managers' opinion⁷.

Furthermore, managers in the sectors in decline try to hoard qualified labor by stopping workers from looking for employment elsewhere. Qualified workers ensure high production quality and therefore the firm's competitiveness. These same workers are the most likely to be capable of adapting to new production conditions. The need for teams of polyvalent maintenance technicians is still apparent in many establishments due to the slow pace of dismantling of old production lines⁸.

But new firms and/or firms enjoying expansion, particularly companies with foreign participation are also those with the greatest means and the best reasons for forming highly structured internal markets⁹. Wage rises and promotion perspectives offer, in effect, a means of attracting the most qualified workers¹⁰, increasing worker productivity and discipline, especially in an environment where there is an abundance of work on offer. In Poland, wages are highest in firms with foreign participation and the introduction of foreign capital was accompanied by an increase of 15 to 20% in average wages¹¹. In Slovakia, in 1994¹², workers at firms with foreign participation earned on average 30% more than the average remuneration. Likewise, certain foreign firms aim to increase workers' specific qualifications. The Swiss-Swedish firm, ABB, is a good illustration of this tendency. It bought the Polish turbine factory Zamech in 1990 and in 1994 founded training centers in Brno and Warsaw, training 17 000 workers in the Czech Republic and Poland.

Privatized companies engaged in an offensive restructuring process, in Hungary and in Poland more often than in ex-Czechoslovakia, tend to found a highly structured internal market. A survey by Roberts and alii [1997] reveals that in Poland private entrepreneurs have begun to use old methods to obtain trained workers by subsidizing schools and offering work experience to the students. Half of the state-run and private firms surveyed - the largest ones - supplied secondary school students with work experience.

State-run firms, constrained during the first years of transition by national policy on wage controls, have on the other hand had trouble maintaining their former highly structured internal markets. Strict rules on wage increases left them with little scope for offering attractive wages to attract or retain qualified labor.

This wage regulation was successful in all the countries under consideration, with the exception of Poland, where strong labor unions, friendly with management, pushed for

⁷ A survey of 25 firms in the Polish electromechanical sector carried out in 1995 [X. RICHET, 1997] reveals that 40% of them hoarded labor. One of the main reasons given, other than social considerations, employee resistance and other legal obstacles, was the fear of not finding qualified personnel if production took off again. A survey of 193 firms in the Czech Republic in 1993 showed that 12.4% of them had trouble recruiting qualified labor, the percentage being even higher for state-run companies [J. KOUBEK, 1994].

⁸ In the electromechanical sector in Poland, for example, the majority of active workers were first hired back to the 1970s.

⁹ However, this type of strategy is not systematic and differs from sector to sector. Thus, IBM, based in the Szekesfehervar region of Hungary, practices a policy of hiring inexpensive labor with a high turnover. Qualified workers represent only 20% of manpower, which is, in general, overqualified. Lastly, whereas Hungarian law requires the formation of workers' councils in all firms employing more than 50 workers, one has not been formed at IBM [C. MAKÓ, 1997].

¹⁰ There is, in particular, a shortage of competencies now essential in the fields of marketing, accounting, finance, legal counsel, and of advanced technicians. It is not so much their specific character as their rarity that makes company directors try to stabilize these workers.

¹¹ J. DABROWSKI, M. FEDEROWICZ, A. LEVITAS, 1993.

¹² OECD, 1995.

standards to be changed. For this reason, an internal coalition between directors and workers persists in state-run and newly privatized firms. Directors have every reason to unite with workers in order to maintain their position (as the representatives of the personnel form 1/3 of administrative councils). The common goal is the firm's survival, particularly when its existence is threatened. The continued presence of old managers contributes to behavioral inertia, all the more so because these managers are risk averse, and, therefore, maintain the internal markets.

Thus there are several dichotomies on the labor market during this transition period, depending on the sector of activity, the size and the type of ownership. The primary segment does not, therefore, appear homogenous, but is itself sub-divided into several layers.

Conclusion

This study makes it clear that two distinct segments coexist on the Central European labor markets. Labor market segmentation, particularly remarkable in Poland, results from a combination of new formal institutions and the persistence of old, informal institutions. The allocation of labor differs from one to the other; the first segment concentrates a greater proportion of men, people residing in the capital, occupying a management position and working in private establishments, as well as the mining, energy and finance sectors. Education levels, on the other hand, do not play a significant role in the affectation of workers during the transition period. This result signals both the obsolescence of former training circuits and the fact that the productive characteristics on entry to the labor market do not determine the affectation of workers.

Wage structures on the two segments are significantly different. The level of education plays, in particular, a different role depending on the segment. This fact underlines the link between the return of education and the position occupied. Thus, the return of general qualifications is higher on the primary segment (except in the Czech Republic) whereas that of specific qualifications is higher on the secondary segment. This last element reflects systemic transition: establishments on the first segment are those which attract fresh manpower, newly arrived on the labor market, as well as the most qualified workers who have left their former employment in order to enjoy higher wages. For these reasons, the "pure" segment characteristics such as defined by Doeringer and Piore are not to be found. Labor market structure is clearly marked by structural characteristics inherent in each of the transition economies.

In addition to a limited access of women to the primary segment, sexual discrimination is manifest on all segments of the market. Whereas they form a majority on the secondary segment, women are still penalized on both segments. It would then appear that women belong to the lowest levels of each layer, which may in turn be divided in several layers.

These results confirm the importance of labor market structure in wage determination and reinforce the idea that remuneration cannot be determined solely by competitive mechanisms. Co-ordination is not, in this case, the product of the market, but that of the firm; it is co-ordination which establishes wages, in particular as a function of the post occupied. This determination depends on a set of administrative rules internal to the firm, driven by collective action and customs. The sector of activity catalyses the set of rules

used by the firms it encompasses by promoting a collective knowledge, common values, specific professional relations and thus encouraging a certain behavioral stability. This explains why labor market segmentation is based, in large part, on branches of activity - these branches being sexually segregated.

These tests offer a starting point for a more detailed analysis of labor market segmentation. They concentrate only on a dual vision of a market which, in fact, should be divided into several sub-markets. The multiplication of organizational forms during systemic change reinforces an interpretation in terms of labor market structure, rather than in terms of duality. Furthermore, these measurements do not integrate certain qualitative characteristics of the segments, such as work conditions, nor do they provide a vision of career possibilities on each segment (understanding career possibilities being, in fact, one of the theory's fundamental contributions). This analysis should, therefore, be furthered by surveys of specific establishments in order to differentiate labor management practices on each segment.

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ANNEXE A.1: Definition of Variables

<i>Variable</i>	<i>Definition</i>
Inwage	Natural logarithm of monthly wage (in national unit)
woman	Equals 1 if the person is a woman, else 0
nbreduc	Number of years of schooling
apprenti	Equals 1 if education level is apprentice training, else 0
sectech	Equals 1 if education level is secondary technical school, else 0
secgal	Equals 1 if education level is secondary general school, else 0
tertiary	Equals 1 if education level is tertiary education, else 0
exp	Number of years of experience
tenure	Number of years of tenure
capital	Equals 1 if the person lives in the country's capital (or the region surrounding the country's capital), else 0
coop	Equals 1 if the person works in a cooperative, else 0
public	Equals 1 if the person works in a state-run establishment, else 0
privatise	Equals 1 if the person works in a privatised establishment, else 0
private	Equals 1 if the person works in a private establishment, else 0
foreign	Equals 1 if the person works in a foreign establishment, else 0
minrj	Equals 1 if the person's sector of activity is mines or energy, else 0
ind	Equals 1 if the person's sector of activity is industry, else 0
construc	Equals 1 if the person's sector of activity is construction, else 0
transpor	Equals 1 if the person's sector of activity is transports or communications, else 0
comrest	Equals 1 if the person's sector of activity is retail trade or catering, else 0
finance	Equals 1 if the person's sector of activity is finance, else 0
edhealth	Equals 1 if the person's sector of activity is education, health or social services, else 0
admpolic	Equals 1 if the person's sector of activity is administration or police, else 0
manag1_9	Equals 1 if the person manages between 1 and 9 persons, else 0
manag10	Equals 1 if the person manages 10 persons and more, else 0
seniorex	Equals 1 if the person is a higher-grade professionals, administrators, or officials, else 0
juniores	Equals 1 if the person is a lower-grade professionals, administrators, or officials, else 0
employe	Equals 1 if the person is a non manual employee, else 0
skilwor	Equals 1 if the person is a skilled manual worker, else 0
nskilwor	Equals 1 if the person is a semi- or unskilled manual worker, else 0

ANNEXE A.2: Mean and Standard Deviation of Variables

	<i>Hungary</i>		<i>Poland</i>		<i>Czech Republic</i>		<i>Slovakia</i>	
	Mean	Standard error	Mean	Standard error	Mean	Standard error	Mean	Standard error
lnwage	9,559	0,444	8,076	0,476	8,244	0,401	8,233	0,360
age	36,105	11,178	37,585	10,151	40,607	10,669	38,996	7,810
nbeduc	12,023	3,052	11,967	3,034	12,673	2,743	12,723	2,739
apprenti	0,324	0,468	0,278	0,448	0,370	0,483	0,347	0,476
sectech	0,194	0,396	0,208	0,406	0,238	0,426	0,094	0,293
secgal	0,126	0,332	0,168	0,374	0,096	0,295	0,268	0,443
tertiary	0,131	0,338	0,114	0,318	0,128	0,334	0,129	0,335
exp	17,370	11,221	17,728	10,619	20,178	11,004	18,639	8,575
tenure	7,225	7,687	8,124	8,335	8,679	9,446	9,433	8,393
capital	0,200	0,400	0,185	0,389	0,285	0,452	0,094	0,293
coop	0,098	0,298	0,061	0,240	0,051	0,220	0,094	0,292
public	0,753	0,431	0,786	0,410	0,774	0,418	0,858	0,350
privatise	0,065	0,247	0,048	0,215	0,078	0,269		
private	0,112	0,316	0,124	0,330	0,092	0,289	0,048	0,214
foreign	0,038	0,192	0,020	0,140	0,025	0,156	0,009	0,094
minrj	0,026	0,159	0,085	0,280	0,053	0,224	0,055	0,228
ind	0,265	0,442	0,131	0,338	0,248	0,432	0,260	0,439
construc	0,041	0,199	0,078	0,269	0,078	0,269	0,080	0,272
transpor	0,071	0,257	0,098	0,298	0,086	0,281	0,088	0,283
comrest	0,129	0,335	0,083	0,276	0,097	0,296	0,060	0,238
finance	0,020	0,139	0,033	0,178	0,026	0,159	0,004	0,067
edhealth	0,182	0,386	0,209	0,407	0,173	0,379	0,187	0,390
admpolic	0,074	0,262	0,070	0,255	0,073	0,260	0,050	0,218
autre	0,097	0,296	0,123	0,328	0,075	0,263	0,051	0,220
manag1_9	0,063	0,243	0,110	0,313	0,121	0,326	0,103	0,305
manag10	0,056	0,230	0,063	0,243	0,055	0,229	0,084	0,277
seniorex	0,069	0,254	0,101	0,302	0,116	0,321	0,069	0,253
juniores	0,172	0,378	0,145	0,353	0,172	0,377	0,145	0,353
employe	0,224	0,417	0,248	0,432	0,221	0,415	0,183	0,387
skilwor	0,235	0,424	0,214	0,410	0,171	0,377	0,236	0,425
nskilwor	0,264	0,441	0,276	0,448	0,296	0,456	0,301	0,459
N	1868		1214		2895		1848	

Labour Market, Unemployment and Private Sector Growth in post-communist Transition Economies

A.Tichit¹

I/ Introduction

Transition began in 1989 in Central European Countries and in 1991 in Former Soviet Union (FSU) and Eastern Europe. This is a process from an entirely planned economy to a private one. One consequence of this transformation is the reduction of public production and employment concurrently with the development of private activities.

The policies enforced to achieve the necessary restructurations in the state sector were very different among the 26 countries considered. In general, Central and Eastern European Countries (CEEC) made large labour shedding. On the contrary, in FSU, employment was maintained thanks to a reduction in working hours and wages².

As a consequence, these different policies generated heterogeneous unemployment levels among the post-communist's transition countries. In CEEC's, unemployment has been progressing fast since the first reforms were enforced and reaches now 15 - 20%.

At the same time, private sector is growing. On the other hand, in FSU unemployment stays officially at a low level, between 1 and 2%. State workers keep their job and go to informal activities to compensate the monetary wage loss. Then, unemployment is low but the development of the formal private sector is broken.

A lot of labour adjustment models have been created since the beginning of the transition. Nevertheless, most of them were developed to describe the process in CEEC's. FSU's analysis seems to have been neglected so far. Likewise, they conclude that unemployment is a necessary transition factor as it prevents a too high private wage level³.

¹ CERDI, 63-65 Bd F.Mitterrand 63000 Clermont-Fd

² cf Commander, Liberman & Yemtsov (1993), Dadashev (1995), Kibovskaia (1995) and Commander & Tolstopiatenko (1996).

³ Aghion (1993), Aghion & Blanchard (1994) and Burda (1993).

But these models lie on the hypothesis that state workers must first be laid off before getting a private job and that firings doesn't exist in this new sector. But, Boeri (1997) notices that in CEEC's, unemployment risk in private firms is as high as in public enterprises. The flow from a state employment to a private one can account for 70% of new created jobs. As well, voluntary quits can represent about 50% of employment destruction in public sector. Then, unemployment appears as a "stagnant pool". It is difficult for an unemployed person to find a job because private firms prefer employing a state worker instead of a job seeker. Unemployment gives a bad signal to potential employers.

Our model tries to take into account these stylised facts of labour market in transition economies. The Aghion & Blanchard (1994)'s model is modified to capture Boeri's remarks. So, we suppose here that public workers can directly find a job in private formal enterprises without experiencing an unemployment period. After that, there exists a probability of being fired in this sector, as well as in the public one. Moreover, private employer are supposed to prefer to recruit public workers instead of unemployed, because of adverse selection and informational problems concerning labour productivity. Then, private salaries will be fixed to be attractive for state employees. Nevertheless, labour demand can't be filled only by public agent. A part will be provided by unemployed, supposed receiving the same wage as a worker coming from the state sector.

As a result, private wage level will depend on public agents' preferences. Considering this constraint, firms will determine their employment creation. Then, at each salary will correspond an unemployment level resulting from equality between wage requirement and job creation. At the same time, economic equilibrium is defined by constant private employment and unemployment levels. Combination of these conditions with equality between job creation and wage requirement of public workers gives the unemployment and private wage and level of employment equilibria. The main results are that private wage and employment levels and unemployment rate equilibrium, as well as transition dynamics depend on fire probability difference between public and private sector. Especially, it appears that unemployment is a positive factor for new sector development only if the lay off probability is higher in state sector than in private one.

The paper is organised as follow. Section II presents the benchmark model and is divided in four parts. The first determines state workers reservation wage; the second describes private firms' job creation process and the associated function linking unemployment to salary; the third introduces private employment and unemployment equilibrium conditions and finally, the last one shows the global economic equilibrium. Section III consists in a comparative static analysis to infer the impact of variation of any parameters on equilibrium.

II/ Benchmark model

1. Public workers' reservation wage

By hypothesis, state firms fire a constant part of their work force because of restructurations, price liberalisation and drop of the demand for their products⁴. State workers are supposed to

⁴ We suppose that even if budget constraint is relatively weak, it is sufficient to make firms fire workers.

be homogenous and to face the same redundancy probability, s . Each time, public employee can also find a private job with probability α or stay in the state sector with a probability $(1-s-\alpha)$.

Nevertheless, decision to quit a public job is definitive because state enterprises are supposed not to proceed to new hires⁵.

Agent's utility maximisation program is as follows:

$$\text{Max } E(W) e^{-rt} \quad (1) \quad \text{where } E(W) \text{ is the expected utility.}$$

With Bellman's optimisation method, we have the condition⁶:

$$rV_E = (w^S + c) + s(V_U - V_E) + \alpha(V_N - V_E) + \frac{dV_E}{dt} \quad (2)$$

Where V_E , V_U and V_N are respectively the values of public job, unemployment and private work. w^S is the public salary and c represents non monetary advantages of civil servant's position⁷. The equation obtained indicates that the expected gain of a state job is equal to the different premium or loss dependant on this status. State workers will accept a new sector's job only if it procures a better lifetime utility than a public one. Formally, this condition is:

$$V_N \geq V_E \quad (3)$$

As new entrepreneurs prefer to hire state workers rather than unemployed, they will fix their salary in order to satisfy condition (3). But, as they try to pay the lowest wage, they will offer a wage that equalises V_N and V_E . So we have⁸:

$$V_N = V_E \Leftrightarrow \frac{dV_N}{dt} = \frac{dV_E}{dt} \quad (4)$$

And lifetime discounted value of a private job is:

$$rV_N = w^N + p(V_U - V_N) + \frac{dV_N}{dt} \quad (5)$$

with w^N the private salary and p the probability to be laid off.

Equalising (2) and (5), we obtain the following condition:

$$V_N - V_U = \frac{w^N - (w^S + c)}{p - s} \quad (6)$$

From this, it stands:

⁵ This hypothesis seems to well reflect the reality of transition economies and was done by numerous authors.

⁶ cf. Annexe 1 for calculation details.

⁷ In particular all social advantages (health, education, primes,...)

⁸ This simplification was done by Kimball (1994).

$$\frac{dV_U}{dt} - \frac{dV_N}{dt} = \frac{-1}{p-s} \frac{dw^N}{dt} \quad (6')$$

When the difference between private employment and unemployment values is varying, public agents' reservation wage is modified⁹. But, like Aghion (1993), we suppose that, for efficiency considerations¹⁰, private firms choose a wage such that the value of being employed exceeds the value of being unemployed by some amount, such as:

$$V_N - V_U = d \geq 0 \Rightarrow \frac{dV_N}{dt} - \frac{dV_U}{dt} = 0 \quad (7)$$

So, state workers' reservation wage is a constant in time. An additional condition for $V_N - V_U \geq 0$, is when $p > s$, then $w^N > (w^S + c)$ and the opposite when $s > p$ (cf. Condition (6)).

Finally, unemployment value satisfies the following "asset" equation:

$$rV_U = b + h(V_N - V_U) + \frac{dV_U}{dt} \quad (8)$$

with b the unemployment benefits and h the probability to find a private job. Unemployed are paid the same wage as agents coming from public sector and have the same risk p of dismissal.

So, combining (8) with (5), utilising (6) and (7) gives the following curve:

$$w^N = \frac{(w^S + c)(p + r + h) - (p - s)b}{(s + r + h)} \quad (9)$$

This expression replaces the supply curve of standard labour market models. Giving this constraint, private firms determine their employment creation.

2. Private job creation

According to Aghion (1993)¹¹, the private labour demand takes the following form:

$$H = a(y - w^N) \quad (10)$$

with H , the number of new hirings¹², y the marginal labour productivity (supposed to be constant) and a a coefficient representing at the same time the account rate and the firms' negotiation power vis-à-vis workers. To simplify, we set, as done by Ruggerone (1996), $a = 1$.

From this it follows:

⁹ This means that time after time agents will be recruited in the new sector at different wage levels.

¹⁰ Effectively, once employed in private sector, the unique comparison is the unemployment situation as a come back to a state job is impossible. So, private enterprises secure a constant net gain of employment to unemployment, once worker recruited.

¹¹ "Economic reform in Eastern Europe: Can theory help?" *AER*, vol 37, 1993, p 525-532.

¹² Unlike Aghion, these are gross creations as it exists at the same time private job destructions.

$$h = \frac{\beta H}{U} \Leftrightarrow h = \frac{\beta(y - w^N)}{U} \quad (11)$$

where β is the part of new jobs provided by unemployed, with $0 < \beta < 1$ and $\beta < (1 - \beta)$ by hypothesis. Replacing h by its expression in (9), gives:

$$U^* = \frac{\beta [w^{N^2} - w^N [y + (w^S + c)] + (w^S + c)y]}{(r + s)w^N - (r + p)(w^S + c) + b(p - s)} \quad (12)$$

This function represents the equilibrium points between public employees' reservation wage and private job creation, conducing to a certain unemployment level, when creations are not sufficient enough to offset public job destructions. This function is clearly discontinuous, as it exists wage levels which make denominator equal to zero. Moreover, this function must be always positive. Then, the analysis will be limited to wage range consistent with $U > 0$ (cf. Annex 2).

Conditions and function property on wage range obtained are resumed in the following table¹³:

	Numerator	Denominator	w^N	U^*
$s > p$	+	+	$\in]w^{dN}; (w^S + c)[$	<i>decreasing at increasing rate</i>
$p > s$	-	-	$\in [(w^S + c); w^{dN}[$	<i>increasing at increasing rate</i>

We have to consider two distinct cases. When unemployment risk is higher in the state sector, private wage is necessary lower than public agents' remuneration. On the contrary, when unemployment probability is higher in private sector, employers must pay a premium to offset the additional risk linked to private employment¹⁴.

As well, when $s > p$, wage is a decreasing function of unemployment. Unemployment appears to be a "transfer device", as agents will require a lower wage to accept a private job. So, we join here Aghion & Blanchard (1994) and Burda (1993)'s conclusions that, in transition economies, unemployment may accelerate private sector development in short term as it reduces wage¹⁵. But, when $p > s$, unemployment causes private wage to be higher to attract state employees. In this case, unemployment is negative for private sector development, as the agent will be more reluctant to quit a less risky position.

However, in the two cases, when unemployment is zero, private and public wages will equalise¹⁶. Indeed, differential between lay off probability in state and private sector has no effect as workers can immediately find a job and so will accept a new work for a monetary wage equal to public revenue.

¹³ w^{dN} is the limit wage for which denominator equals zero.

¹⁴ This difference between the two cases comes from condition (6)

¹⁵ They supposed p to be zero, so our model is an enlargement of theirs.

¹⁶ $(w^S + c)$ is a unitary root of the numerator of equation (12).

Now, to determine at which level will stand wage and unemployment on equilibrium, we shall describe equations flow of unemployment and private employment. Confronting these equations to (12) allows us to find the equilibrium of unemployment, private wage and employment levels.

3. Unemployment and private employment equations flow

In the economy, agents can be unemployed, employed in the state or in private sector. Workforce is supposed to be constant¹⁷, so we have:

$$L + S + U = I \quad (13)$$

L , S and U are respectively parts of private, public employment and unemployment in total workforce.

And the equations flow are the following¹⁸:

$$\dot{U} = (p - s)L + s(1 - U) - \beta H \quad (14)$$

$$\dot{L} = H - pL \quad (15)$$

Replacing H by (10) in (14) and (15) gives :

$$\dot{U} = (p - s)L + s(1 - U) - \beta(y - w^N) \quad (14')$$

$$\dot{L} = y - w^N - pL \quad (15')$$

Economic equilibrium, characterised by $\dot{U} = \dot{L} = 0$, corresponds to:

$$U^{**} = \frac{[p(1 - \beta) - s](y - w^N)}{sp} + 1 \quad (17)$$

This expression gives the combinations between U and w^N permitting $\dot{U} = \dot{L} = 0$. An extra condition for $0 < U < I$ is:

$$\frac{-ps}{(y - w^N)} < p(1 - \beta) - s < 0 \quad (18)$$

The dismissal probability in state sector must always be higher than the one in the private sector time the part of new jobs provided by state agents.

The slope of (17) is:

¹⁷ Total work power is normalised to 1.

¹⁸ Dot upon variable represents variation in time.

$$\frac{\partial U^{**}}{\partial w^N} = -\frac{[p(1-\beta) - s]}{sp} \quad (19)$$

This derivative is always positive for $0 < U < 1$: U^{**} is an increasing function of w^N .

At least, this equilibrium straight must be confronted with U^* , to obtain global economic equilibrium. At first, a graphic representation of equilibria in the two different cases is shown, before making comparative statics to analyse the effects of any parameters variation on equilibrium levels.

4. Global equilibrium

Unemployment and private employment equilibrium levels result from intersection of U^* with U^{**} curves in U - w^N plan. From salary level follows employment creation given by (10). And from unemployment we can infer equilibrium private employment level thanks to the following equation coming from $\dot{U} = \dot{L} = 0$:

$$U = 1 + \frac{p(1-\beta) - s}{s} L \quad (20) \quad \text{with } p(1-\beta) - s < 0$$

The slope of this straight is negative and inferior in absolute value to the one of U^{**} as $s > sp$.

Two cases must be considered separately. The first is when $(s > p > p(1-\beta)^{1/\theta})$: U^* is decreasing in $w^N \in]w^{dN}; (w^S + c)[$ and U^{**} is increasing. It exists only one equilibrium point. The second is when $p > s > p(1-\beta)$: U^* is increasing with $w^N \in [(w^S + c); w^{dN}[$ and it can exist two equilibrium points.

First, we can remark that when unemployment probability in the state sector is higher than in the private one, equilibrium is characterised by a private wage lower than the revenue perceived in the public sector. There exists involuntary unemployment because new jobs creation is not sufficient enough to offset the diminishing size of public sector.

Dynamics around this point is very simple. As noted earlier, we will always be on U^* curve as private firms will instantaneously adjust their employment creation to public agents' wage requirement. If transition begins in point A, with a high unemployment level and so, low private wages, employment creation is high and unemployment decreases. But wages are increasing which implies the reduction of new job creations till the equilibrium point.

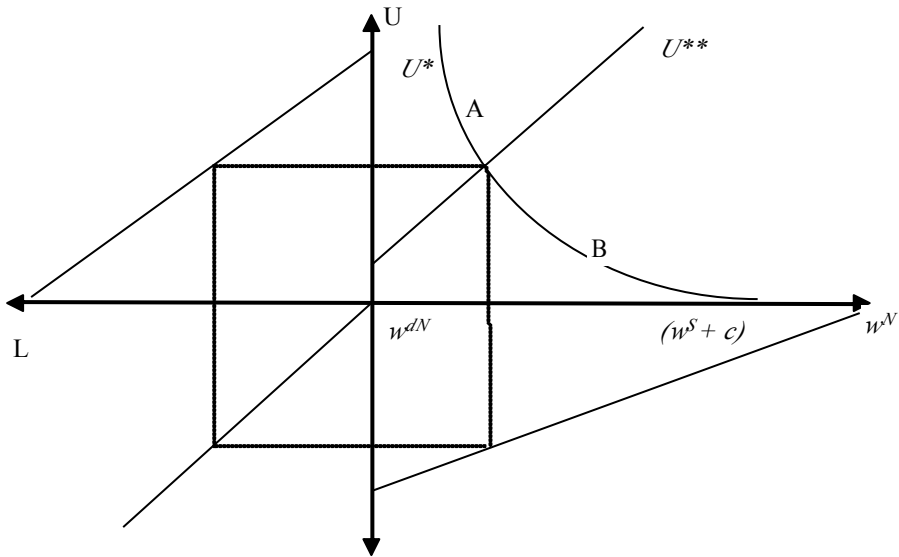
On the other hand, if transition begins with a low unemployment level, private salaries required are high and employment creation is low. So, unemployment growth lead to a wage drop and so to an increase in job creation till equilibrium.

Graphically, it gives:

¹⁹ We have logically $p > p(1-\beta)$ as $0 < (1-\beta) < 1$. So, condition (18) will always be satisfied in this case.

Figure 1.

Equilibrium with $s > p > p(1-\beta)$:



This case can reflect transition in CEEC's, where liberalisation and restructurations generated large firings in public sector. So, in these countries, lay off probability seems to be higher in the state sector than in the private one²⁰.

Moreover, at the beginning of transition, unemployment was low²¹. According to the model, state agents required high wages to accept a private job, which initially generated low employment creation and then unemployment growth, because of high dismissals in public sector. But this unemployment at the first stages of transition caused a downward pressure upon wages leading to the development of private activities. Transition seems to be on the way²².

But these conclusions depend on $s > p$ and we shall now consider the case where $p > s$.

In this case, employers can't offer a wage lower than public sector revenue to offset the additional unemployment risk in the private sector. Likewise, there can exist two equilibrium points.

he first one is characterised by low wage and unemployment levels and high private employment. The second corresponds to high unemployment and wage levels and a weak development of the new sector.

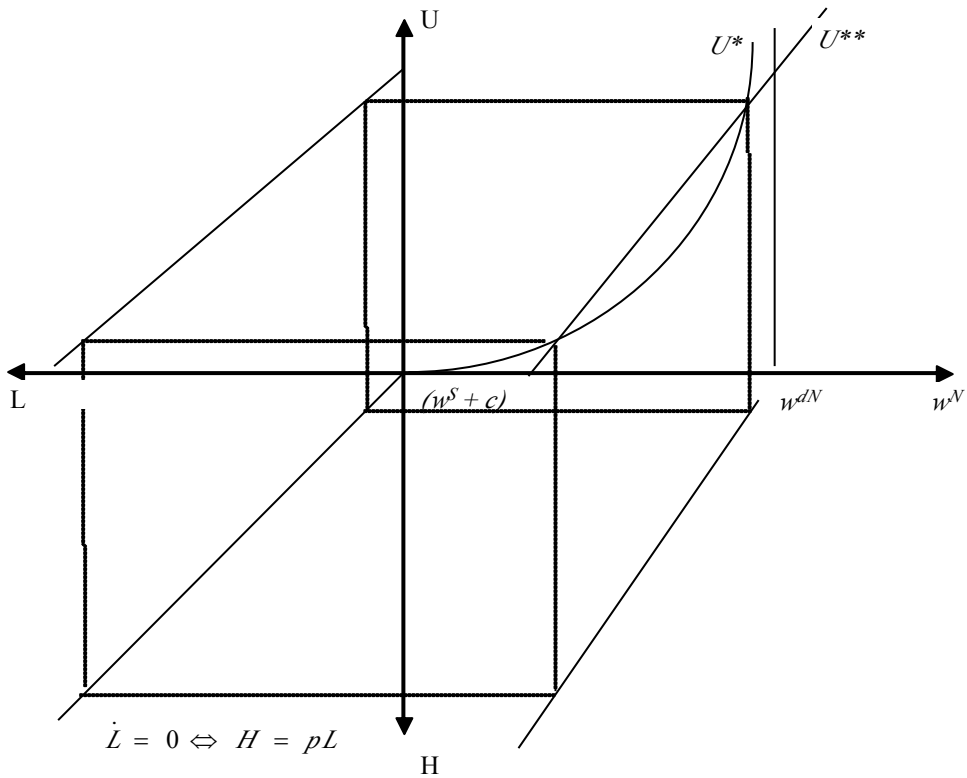
²⁰ Most of the models on labour adjustment in CEEC's make anyway the assumption that unemployment risk in the private sector equals zero.

²¹ Effectively, under planification, "open" unemployment was inexistant.

²² Cf. BERD, Transition Report 1996.

Figure 2.

Equilibrium when $p > s > p(1-\beta)$:



Concerning dynamics, it appears that if the transition begins with some consistent unemployment leading to relatively high wages (point A), employment creation is weak, unemployment rises. As a consequence, public workers are more reluctant to the transfer to the riskier sector and private wage increases.

The economy converges to the second equilibrium point. Transition process is stagnant. On the other hand, if unemployment is initially very low, required salaries are low and then private sector is growing fast (point B). Unemployment decreases leading to a wage drop and the economy goes to an unemployment level equal to zero (if the state sector can be totally destroyed). Private wage is equal to public revenue and the private sector employs all the workforce.

This case can reflect the transition in FSU. As highlighted before, in these countries, the number of employees in state enterprises has been kept high to prevent a too fast unemployment growth, by reducing wages and workhours. Concurrently, private sector seems to experience a weak development and the macroeconomic system is not yet stabilised. So, it

is convenient to suppose that firing probability is higher in the new sector. So, as low as it is, present unemployment is sufficient to make public employees very reluctant to accept a job in the private sector. As a consequence, salary level is high and new sector development is stopped. So, in the following analysis, we will only consider the second equilibrium point, characterised by a weak private job creation.

In spite of the slow progress of unemployment due to low level of dismissal in public sector, the economy converges to a low level of private employment and a high unemployment as private sector never take off. As long as government doesn't enforce active policies, dynamic transition doesn't appear and the economy stays in *statu quo*.

So, this simple model sheds light on stylised facts of labour markets in CEEC's and FSU. At least, comparative statics can infer effects of politics on equilibrium levels. It seems interesting to consider an increase in firings in public sector and in unemployment benefits.

III/ Comparative Statics

1. Increase in state sector dismissal, s :

This will be the case if government strengthens the state firms budgetary constraint or enforces a cut in subventions. U^{**} will shift downward as we have:

$$\frac{\partial U^{**}}{\partial s} = \frac{-(y - w^v)p(1 - \beta)}{s^2} < 0 \quad (21)$$

On the other hand, the effect on U^{**} is different according to cases:

$$\frac{\partial U^*}{\partial s} = \frac{-\beta[w^{N2} - w^N[y + (w^S + c)] + (w^S + c)y]}{[(r + s)w^N - (r + p)(w^S + c) + b(p - s)]^2} \quad (22)$$

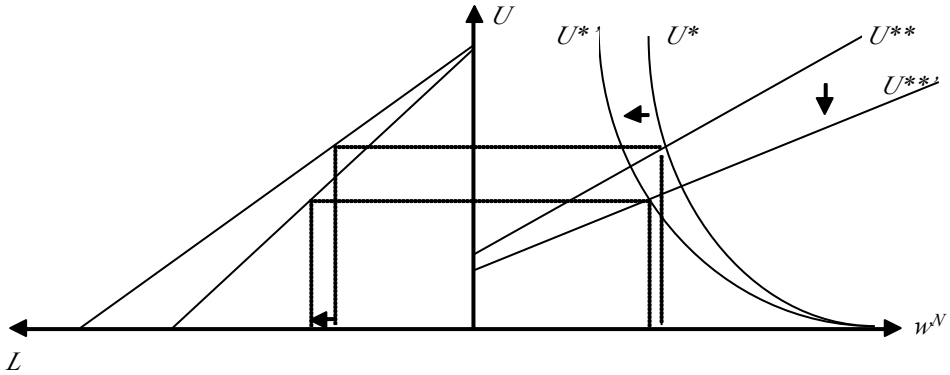
The derivative sign is negative if $s > p$ (as the second order equation of numerator is positive) and positive in the other case. So, this type of policy can have distinct effects, depending on the relative layoff probability in the state and private sectors.

At first, the rise in unemployment probability causes public agents' reservation wage to drop. Employment creation grows and unemployment decreases, leading to a wage growth thereafter, till new equilibrium point. Wage level overshoots its long term value.

However, if the salary stays lower than the initial one, the new equilibrium point is characterised by a lower unemployment and a higher private employment (case shown in figure 3). But, if wages are going beyond the initial ones, employment creations are lower and the unemployment cut comes from less voluntary quits in public sector. So, the weight of private employment in total labour force becomes smaller.

Figure 3.

Effect of an increase in s , with $s > p > p(1-\beta)$:

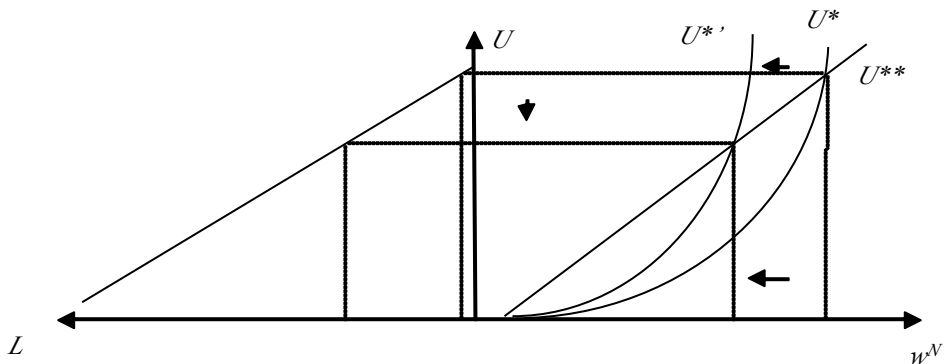


The effect depends on the elasticity of U^* and U^{**} relative to s . If agents are sensitive to this parameter, U^* will shift strongly on the left and the wage at the new equilibrium point will necessarily be lower than initially and so employment creations will be higher. If not, this measure can lead to a lower level of private sector employment.

However, figure 4 shows that in case where $p > s$, this policy is unambiguously positive for the private sector development :

Figure 4.

Effect of an increase in s , with $p > s > p(1-\beta)$:



It clearly appears that any rise in public enterprises' firings generates a fall in wage required by state workers and then an increase in hires with an unemployment cut. So, this policy can help reviving the private sector development.

Finally, it seems interesting to consider the effect of an improvement in unemployment benefits. Conclusions differ sensibly according to cases.

2. Increase in unemployment benefits, b:

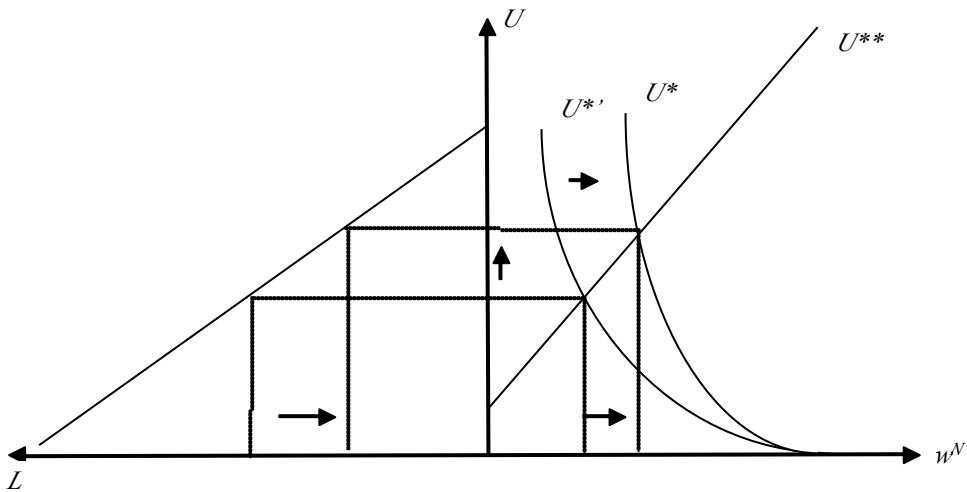
This policy has no impact on U^{**} . However, agents' wage requirement will be modified as follows:

$$\frac{\partial U^*}{\partial b} = \frac{-\beta(p-s)[w^N - w^N[y + (w^S + c)] + (w^S + c)y]}{[(r+s)w^N - (r+p)(w^S + c) + b(p-s)]^2} > 0$$

In any case, U^{**} is shifting upward. Figures 5 and 6 show the resulting impact on equilibria.

Figure 5.

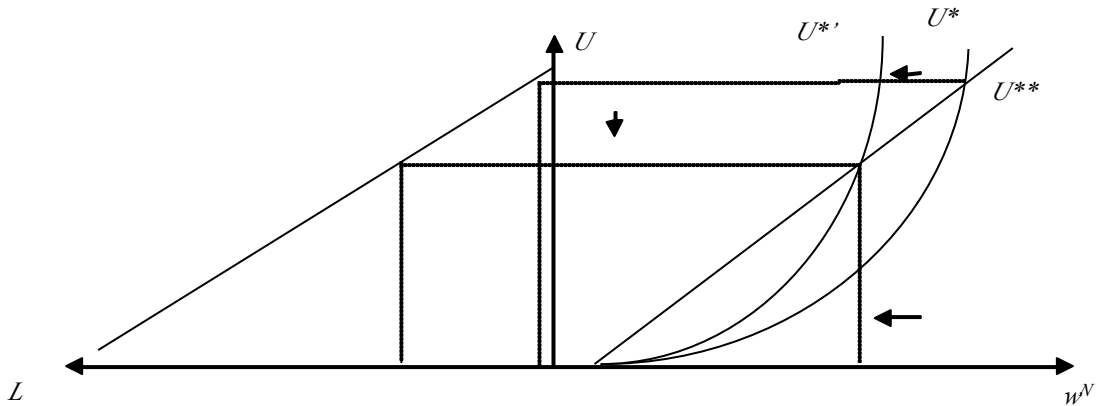
Increase in b with $s > p > p(1-\beta)$:



Any rise in unemployment benefits produces an increase in private salary. Indeed, private entrepreneurs need to rise the wage to offset unemployment value growth. As a consequence, employment creation falls and unemployment rises. According to Aghion & Blanchard (1994), our model follows here conclusions generally found in job search models: a rise in unemployment benefits increases wages and damps employment creation. But this is true only when $s > p$ and conclusions when $p > s$ are very different, as shown by figure 6:

Figure 6.

Increase in b with $p > s > p(1-\beta)$:



In this case, any rise in unemployment benefits induces a wage drop and so an increase in job creation. As new sector appears riskier, agents will be less reluctant to transfer from public to private sector if the cost linked to job loss in the new sector becomes lower. So, this policy leads to a rise in private employment and a fall in unemployment on equilibrium. Then, conclusions here are opposite to those generally found in literature. In FSU, unemployment benefits are very low. According to the model, this can be an explanation for the public workers' reserve towards the transfer and private sector development stagnation.

So, in addition to the preceding case, the model permits to conclude that when private sector is growing, any rise in unemployment benefits freezes its development. But when new sector development is broken, this type of policy can make lower state workers' reservation wage and so induce a private employment creation take off.

IV/ CONCLUSION

The simple model developed here sheds light on stylised facts of labour adjustment in post communist transition economies. The main hypothesis are that state workers can directly find a job in the private sector, without any unemployment period, and that new firms prefer hiring public agents than unemployed.

The principal results are that private salary and the employment and unemployment levels at equilibrium are determined according to the difference in lay off probability between public and private sector. If unemployment risk is higher in state firms, private wage is lower than public revenues and the economy converges to a low unemployment level and a high private employment in long term. Likewise, during transition, unemployment is a positive factor of private sector development as it reduces wages. This case can be compared with transition in CEEC's.

On the other hand, as the new sector jobs are riskier than the public ones, private wage is higher than state remuneration and two equilibrium points can arise. The first is characterised by a high private job creation and low wage and unemployment levels. The second

corresponds to high private wage and unemployment levels and low employment creation. When an unemployment rate at the beginning of transition appears because of restructurations and firings in state sector, the economy converges to the second equilibrium point, private job creation is stagnant. This configuration can reflect transition in FSU.

Finally, comparative statics show that an increase in public sector lay off probability can dynamize new sector job creation, in particular when private activities growth is broken. On the other hand, concerning any increase in unemployment benefits, expected effects are in opposite direction according to the two cases. When unemployment risk is higher in public sector, any benefits appreciation leads to a rise in private salaries and so to a fall in job creation. But in the second case, when dismissal probability is lower in the state sector, the increase in unemployment allocations reduces public employees' reservation wage and so private employment development revives. Then, our model shows that a negative effect of unemployment benefits appreciation on private sector appears only in a specific case and is not a general fact.

However, these conclusions depend on the hypothesis that unemployed persons are hired at the same wage level as agents coming from public sector. It could be interesting to introduce distinct remuneration among types of applicant and see how the conclusions of the model would be modified.

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ANNEX 1: Utility maximisation using Bellman's equation

Bellman's resolution principle is based on temporal recursivity of the problem. Agent's decisions taken at date t will have consequences on his possible choices in the future. Working backwards, we suppose individual to know the future optimal way. So, what determines agent's choice at time t are the different optimal values linked to these choices. The temporal program is reduced to a one period choice. Here is the individual program:

$$\text{Max } E(W) e^{rt} \quad (1) \quad \text{with } r \text{ the discount rate and } E(W) \text{ the expected utility across time.}$$

Bellman's equation reduces this problem to:

$$V_E = \text{Max} [(w^S + c) + e^{rt} E(V_E)] \quad (2)$$

where V_E is the maximal value of the utility function of being employed in the public sector.

As time is continuous, contribution on a short time interval dt , of agent's decision to stay in state sector gives him an immediate supplementary utility of $(w^S + c)dt$ but also, he will have sdt probability to be fired, αdt to transfer to a private job and $(1-sdt-\alpha dt)$ to keep his public employment last period. So, it stands that:

$$V_E = (w^S + c)dt + [sdt V_U + \alpha dt V_N + (1-sdt-\alpha dt) V_{E(t+dt)}] e^{-rdt} \quad (3)$$

where V_U is the maximal value of the utility function of being unemployed and V_N the one of being employed in private sector.

As $e^{-rt} \cong 1 - rt$, we have:

$$V_E = (w^S + c)dt + (1-rdt)[sdt V_U + \alpha dt V_N + (1-sdt-\alpha dt) V_{E(t+dt)}] \quad (3')$$

Using a Taylor's development around point t , we obtain:

$$V_{E(t+dt)} = V_E + \frac{dV_E}{dt} dt \quad (4)$$

And so:

$$V_E = (w^S + c)dt + (1-rdt)[sdt V_U + \alpha dt V_N + (1-sdt-\alpha dt) (V_E + \frac{dV_E}{dt} dt)] \quad (5)$$

Developing the expression, the issue is:

$$V_E = (w^S + c)dt + sdt(V_U - V_E) + \alpha dt(V_N - V_E) - rsdt^2 (V_U - V_E) - r\alpha dt^2 (V_N - V_E) + \frac{dV_E}{dt} dt - sdt^2 \frac{dV_E}{dt} - \alpha dt^2 \frac{dV_E}{dt} - rdt \left(\frac{dV_E}{dt} dt - sdt^2 \frac{dV_E}{dt} - \alpha dt^2 \frac{dV_E}{dt} \right) + V_E - rdt V_E \quad (6)$$

When neglecting terms higher than dt order we obtain:

$$0 = (w^S + c)dt + sdt(V_U - V_E) + \alpha dt(V_N - V_E) + \frac{dV_E}{dt} dt - rdt V_E \quad (7)$$

Then, dividing by dt , the final optimal value equation is:

$$rV_E = (w^S + c) + s(V_U - V_E) + \alpha(V_N - V_E) + \frac{dV_E}{dt} \quad (8)$$

ANNEX 2: Conditions for wage level leading to $U > 0$

The unemployment function is the following:

$$U^* = \frac{\beta[w^{N^2} - w^N(y + (w^S + c)) + (w^S + c)y]}{(r + s)w^N - (r + p)(w^S + c) + b(p - s)} \quad (12)$$

We must limit wage values to those leading to positive level of unemployment.

At first, let's consider the numerator properties. It is composed by a second order equation in w^N , with the following determinant:

$$\Delta = [y - (w^S + c)]^2 - 4w^S y = [y - (w^S + c)]^2 > 0$$

This one is positive, so it exists two real roots:

$$w_1^N = \frac{-[y + (w^S + c)] - [y - (w^S + c)]}{2} = w^S + c$$

$$w_2^N = \frac{-[y + (w^S + c)] + [y - (w^S + c)]}{2} = y$$

Then, if private wage value is between public revenue and marginal labour productivity, the second order equation is negative and positive otherwise.

Now let's study denominator properties. This one must always be different from zero, corresponding to the following wage value:

$$(r+s)w^N - (r+p)(w^S + c) + b(p-s) = 0 \Leftrightarrow w^{dN} = \frac{(r+p)(w^S + c) - b(p-s)}{r+s} \quad (19)$$

Before this threshold value, denominator is negative and positive thereafter. But is this threshold wage higher or smaller than the first numerator's root, namely $(w^S + c)$? We stand:

$$w^{dN} > (w^S + c) \Leftrightarrow (p-s)(w^S + c - b) > 0 \quad (20)$$

As $(w^S + c) > b$, this condition is always verified if $p > s$, and never in the other case. So, if $s > p$, it exists a continuous positive segment for $w^N < (w^S + c)$, and for $w^N >$

$(w^S + c)$ if $p > s$.

Finally, what is the form of this function on the continuous positive segments ?

$$\frac{\partial U^{**}}{\partial w^N} = \frac{\beta \left((r+s)w^{N^2} - 2w^N[(w^S+c)(r+p) - b(p-s)] + (p-s)[y(w^S+c-1) - (w^S+c)] + (w^S+c)^2(r+p) \right)}{[(r+p)w^N - (w^S+c)(r+s) + b(p-s)]^2} \quad (21)$$

If we consider wage value between $(w^S + c)$ and y , it exists only one point where derivative equals zero which is:

$$w^N = \frac{(w^S + c)(r+p) - b(p-s)}{r+s} \quad (22)$$

This point is the same as the denominator threshold. Therefore, when function (12) tends to maximum between $(w^S + c)$ and y , as denominator tends to zero, function tends to infinity.

So we have to consider two distinct cases leading to $U > 0$:

- if $p > s$, denominator may be negative for $w^N > (w^S + c)$, and so, U^* may be positive only between the numerator's roots, namely $(w^S + c)$ and y . Moreover, function (12) tends to infinity when w^N tends to w^{dN} , with $(w^S + c) < w^{dN} < y$.

- if $p < s$, denominator may be positive for $w^N < (w^S + c)$ with $w^{dN} < (w^S + c)$. Moreover, function (12) tends to infinity when w^N tends to w^{dN} .

In short, to have $U > 0$, according to the cases, wage value conditions are the following:

$$- s > p. \quad w^{dN} < w^N < (w^S + c)$$

$$- s < p. \quad (w^S + c) < w^N < w^{dN} < y$$

Trade and Labor Markets. Vertical and Regional Differentiation in Italy

Giuseppe Celi* and Maria Luigia Segnana**

1. Introduction

The impact of international trade on the labor market is a topic of growing interest among economists. In the last two decades, income distribution has changed greatly in the USA, with a widening gap between the wages of skilled and unskilled workers. Although West European countries have not shown such a dramatic change in income differentials (with the exception of the UK), they have exhibited high rates of unemployment, especially among less skilled workers. This empirical finding has raised the question of whether the unfavorable pressure on lower-skilled labor forces in developed economies can be ascribed to the increasing competitiveness of low cost countries or to technological innovation.

The standard theory of international trade (H-O-S model) yields strong results on the link between trade flows and income differentials: the opening of international trade between countries with different endowments of human skills leads to a decline in the relative wages of unskilled workers in the more developed countries. Adding real wages rigidities for the unskilled in socially-regulated labor markets will generate unemployment rather than real wage changes. Although the main prediction of the theory seems to match stylized facts, some American economists (Krugman and Lawrence, *inter alia*) point out that trade among the developed countries (in the form of intra-industry trade) still comprises the most important share of world trade, despite the fast growth of North-South trade. They therefore argue that the impact of trade with developing countries on the labor market in the developed countries is not particularly remarkable. They conclude that the increasing strains on unskilled labor in developed countries should be attributed to technological change rather than to international trade.

A recent book by Adrian Wood (Wood, 1994) disputes this conclusion¹. Wood calculates the impact of North-South trade on unskilled labor demand in the developed countries, and he concludes that twice the number of jobs have been lost than estimated by previous studies. The important point raised by Wood is that previous studies failed to realize that

¹ See also Wood(1995)

the South's exports to the North are *non competing*, indeed different goods even though they belong to the same statistical class. This non-competition is the key factor implying that the displacement effect of North-South trade on unskilled labor demand in the developed countries has been underestimated. Thus, if measurement of product heterogeneity is a way to deal with "non competing goods", this may avert the risk of understating the effects of trade on labor markets.

With reference to Italy, this paper empirically evaluates the impact of trade on labor market by introducing two innovative elements: the vertical and regional differentiations that account for the specificity of the Italian case.

Vertical differentiation in Italian intra-industry trade (IIT) is investigated first. The adjustment effects attributed to IIT are usually judged to be less severe than those associated with inter-industry trade. This is because IIT is considered to be a two-way trade in similar goods between countries with similar factor endowments. Recent developments in the literature on IIT (both theoretical and empirical) also stress the importance of vertical differentiation in intra-industry trade whereby traded goods differ in quality and not only in product attributes. Although the emphasis of these recent studies is oriented towards better understanding of the determinants of IIT, consideration of vertical differentiation in intra-industry trade nevertheless yields a better specification of international trade induced adjustment with regard to the impact on labor markets. In fact, it is reasonable to suppose that differences in quality are associated with differences in skill content, so that high (low) quality products incorporate high (low) content of skilled labor. Under this assumption, the impact of IIT on the composition of labor demand is not so neutral when vertical differentiation plays a dominant role as it does in the horizontal case. The study of the implications of vertical IIT for labor markets is particularly pertinent to the Italian case. In fact, given that the international specialization of the Italian economy is strongly oriented towards traditional consumption goods, the impact of international trade on its labor market is underestimated if vertical product differentiation is not considered adequately.

Secondly, the paper also investigates the relationship between trade and the labor market in terms of Italian regional differentiation. The dualistic character of Italy's industrial structure makes it necessary to use labor market data desegregated by location and by qualification. This allows not only identification of the labor market characteristics of the two areas of the country but also analysis of their differential dynamics by industry, by area and by category. In this way the relative displacement effects of international trade on skilled/unskilled labor demand can be better grasped by looking at trade impact on a regional basis.

These two elements are then linked and trade impact on the Italian labor market(s) can be evaluated by applying on a regional basis the factor content of trade methodology. The results will show a trade impact regionally differentiated with a trade induced displacement effects on demand for unskilled labor more marked in Northern Italy.

In conclusion, the results of the paper show that the introduction of vertical and regional differentiation in the Italian case is a useful methodological approach in that it averts the

risk of understating the effects of trade on labor markets.² Vertical differentiation in Italian intra-industry trade is a warning against understating the effect of trade on labor markets if product heterogeneity is not adequately considered; the regional differentiation of skill intensity is another warning, this time against understating its cross sectoral effect and the change in relative specialization.

The paper consists of six sections. In Section Two the sources of labor displacement are briefly analyzed. Section Three focuses on the theoretical implications of vertical product differentiation, while Section Four offers empirical evidence on Italian trade flows, identifying the share of trade flows that are likely to have an impact on labor market. Section Five describes the move toward white-collar workers as skill upgrading in the labor market at the aggregate and industry levels in the North and the South of the country. Section Five examines the regional differentiation of trade impact by estimating the factorial content of trade flows for the Northern and Southern areas. The final section contains some concluding remarks.

2. Sources of Displacement and Units of Analysis.

With regard to the displacement effect of North-South trade, the issue is whether increasing trade liberalization between industrially more advanced economies and less developed ones has had a significant impact on the labor markets of both types of economy. The debate on “liberalization and the labor market” developed in the late 1980s and the 1990s, especially in the US, and at a time when the challenge raised by the successful catching-up economies (South East Asia) became evident. The central point concerned the magnitude of the effect exerted by trade.³

The discussion still continues, and disputes now center on the analytical framework as well as empirical results in this field. The emphasis has recently shifted to wage inequality as resulting from skill-biased technological change,⁴ on the basis of a widely accepted lack of evidence that trade can explain the relative demand function shift during the 1980s. For instance, production labour-saving technological change seems to have been the chief explanation for the shift in demand away from unskilled and towards skilled labor in US manufacturing during the 1980s. That the demand for skilled labor in most countries is rising rapidly provides strong evidence in favor of the skill-based techno-change account. Most of the literature supports the view that technological improvement is able to explain a good part of the increasing demand for educated workers, as well as widening skill differentials⁵.

On the one hand, when one looks for a trade-based explanation of the displacement effect, one notes the almost universal utilization of a static H.O. framework to analyze these issues, the scant theoretical interaction between trade and labor analyses, a concentration on empirical evaluation. On the other hand, when looking for a technological explanation

² Note that even authors using general equilibrium models to estimate the effect of external trade on EU have complained about a lack of strong results due to the models' inability to capture intra-sectoral adjustments.

³ See the review articles on the debate in the symposium in *Journal of Economic Perspectives*, Summer 1995

⁴ See the recent symposium in *Journal of Economic Perspectives*, Spring 1997

⁵ For recent studies on the impact of trade on wages and employment in Europe see Neven-Wyplosz(1994), Dewatripont-Sapir-Sekkat(1995) and Cortes-Jean-Pisani Ferri(1995).

of the displacement effect, skill-biased technological change seems sometimes to amount to no more than a tautology⁶.

One way to deal with the relative effects on the labor market of size of trade versus technological change is to measure the so-called 'between/within effect'. The trade-demand effect has quite often been associated with a small employment reallocation effect because the 'between' effect has been minor compared with the 'within' effect. Both product heterogeneity and labor market heterogeneity may play a crucial role in this result.

For instance, in the so-called 'between/within' decomposition of the rise in the share of white-collar workers, aggregating industries increases the relative importance of the 'within component' of the decomposition, especially when there are large differences in labor utilization within industries. The 'within component' may hide compositional demand effects due to heterogeneity which in a more desegregated evaluation would result in a much greater 'between effect'.⁷ This is not identifiable with an empirical aggregate evaluation. Hence, whenever sectors are the units of analysis, problems due to heterogeneity may hide important effects.

Which perspective can assist evaluation of these hidden effects? It may help to consider trade among countries with different skill intensities as inducing or changing movements along the quality spectrum for each sector. In other words, trade induces factor substitution *within* sectors at the level of individual products where factors are human capital, knowledge, immaterial and specific factors, etc. Thus, trade impact is intrasectoral and is not neutral on the international or national division of labor, as shown by the vertical differentiation of trade flows.

It could help using regional differentiation. What can regional differentiation add to the trade story? If skill intensities are not ranked by sectors, and if human capital has local specificity, regional desegregation may better highlight intrasectoral changes of specialization; specialization which is now intrasectoral rather than intersectoral.

3. Vertical Product Differentiation: the Impact of Trade on the Labour Market

In the recent controversy on the nature of the link between trade and labor markets, an argument usually advanced by those who deny the importance of trade in the growing strains on less-skilled labor forces in developed economies is that intra-industry trade (IIT) among developed countries is still the most important share of world trade, and an increasing proportion of North-South trade is assuming the form of intra-industry trade. Given that the reallocative and distributive effects of IIT are judged to be less severe than those associated with inter-industry trade, this evidence has led to the conclusion that the recent unfavorable pressure on unskilled labor in developed countries is due to technological change rather than to international trade.⁸

⁶ "Admittedly, the preliminary conclusion that technological change caused the relative demand shifts was somewhat tautological: a) it must have been X_1 , X_2 or X_3 ; b) it was not X_2 or X_3 ; c) ergo, it was X_1 Johnson G., p. 47 in *Journal of Economic Perspectives*, Spring, 1997

⁷ For instance, in Berman *et al.* (1994) the between effect explains 39 % of the shift in employment share at the four digit level and 15% only at two digit level.

⁸ See, for example, P.R.Krugman and R.Z.Lawrence (1994).

The idea of painlessness associated with IIT dynamics is crucial in the above argument. This idea is so entrenched among international economists because most of the literature on intra-industry trade tends to assume that product differentiation is a phenomenon of a horizontal character; that is to say, it is differentiation based on the attributes of a product in a given quality level rather than on differences in quality levels.⁹ Under this view, countries with similar factor endowments and similar (high) income levels exchange distinct varieties of the same product: if expanding and contracting productions show similar factor intensities (in an IIT setting), resource reallocation between them will be easier and wage and price adjustment smaller.

However, the idea of painlessness associated with IIT dynamics becomes weaker if the product differentiation is vertical, that is to say, if products differ in quality. The assumption of factor endowment similarity between countries is less plausible in a context of vertical IIT, where it is quite probable that differences in product quality imply differences in factor content. The growing importance of IIT in trade flows between advanced nations and developing countries has recently prompted a rethinking of the usual image of IIT as two-way trade in horizontally differentiated products and has stimulated the development of models of vertical intra-industry trade.¹⁰

These models show that the forces underlying the vertical differentiation mechanism within IIT are not the same ones that operate in horizontal differentiation. Broadly speaking, in the case of vertical IIT, the dynamics of product differentiation (by quality) moves according to a Heckscher-Ohlin-type logic based on comparative advantages deriving from resource endowments and factor proportions¹¹.

An example of a vertical IIT model based on factor proportions is provided by Falvey and Kierzkowski (1985, henceforth F-K). F-K show the existence of two-way trade in vertically differentiated products by adopting a competitive framework incorporating both Ricardian and Heckscher-Ohlin-type characteristics, with the supply side of the economy being modeled with two sectors, one (Ricardian) producing a single homogeneous good and the other (of H. O. type) manufacturing different qualities of the same product; both sectors employ labor, capital is specific to the sector producing the multiquality product. A crucial assumption is that capital intensity is positively correlated with "quality intensity" of the differentiated product. On the demand side, the F-K model assumes that consumers have the same preferences and that the demand for each quality, given relative prices, depends on an individual's income. A higher level of income is associated with demand for a higher-quality product. Assuming an uneven distribution of aggregate income among consumers, demand for different qualities of product will emerge in the economy, and the range of qualities demanded will depend on income distribution.

F-K model combines the Linder-type idea of the importance of the link between demand structure and income with the traditional sources of comparative advantage: the pattern of vertical IIT is determined by a group of high-income individuals in both countries who

⁹ The reason why the horizontal differentiation paradigm prevails in the IIT literature is that intra-industry trade has generally been represented as a pattern of trade peculiar to developed countries, that is, two-way trade between economies similar in technology, factor endowments and (high) income levels. Empirical evidence provides quite broad support for this image. From a theoretical point of view, the availability of a malleable device like the Chamberlinian monopolistic competition model has also contributed to the explanation of IIT in terms of horizontal product differentiation.

¹⁰ References to vertical intra-industry trade models are in Celi G. (1996).

¹¹ An explanation of IIT based on factor proportions is suggested by Torstensson (1991)

buy high-quality products from the superior technology (capital-abundant) country and a group of low-income consumers who demand low-quality products from the inferior technology country. As regards the adjustment problem, the implications of the F-K model clearly differ from those of horizontal IIT models. Unlike horizontal diversification, vertical product differentiation requires different factor intensities. Consequently, the dynamics of vertical specialization induced by international trade imply more serious reallocative and distributional effects than does horizontal IIT.

Note that in the F-K model each quality is associated with a particular capital-labour ratio. But the logic of the model would not change if the specific factor is embodied by skilled labor instead of capital. Thus a possible extension of the F-K model of vertical IIT could be a framework which assumes a continuum of varieties differentiated by quality, with skill intensity positively related to quality¹². In this framework, skill-abundant countries move along the quality spectrum in each sector with respect to less abundant countries, the result being intra-industry specialization with labor market effects.¹³ It is important to stress that the analytical perspective which considers the relevance of vertical differentiation in trade is an alternative way to pursue A.Wood's notion of non-competing imports: the exchange of different qualities of a product corresponds to the exchange of goods of different natures. In particular, the recent implementation of empirical methodologies able to separate vertical IIT from horizontal IIT in trade data allows one to deal with the product heterogeneity problem at the appropriate level of desegregation.

4. Vertical Product Differentiation: Empirical Evidence for Italy¹⁴

Although theoretical models have demonstrated that the separation between horizontal and vertical IIT is important, in almost all cases empirical studies have tested the determinants of IIT without distinguishing between the two forms of product differentiation within intra-industry trade. Only in recent years have some studies achieved better assessment of empirical investigations by adopting methodological procedures able to disentangle the vertical and horizontal components in IIT.

Although the purpose of these recent empirical works has been to gain better understanding of the determinants of IIT, indirectly the distinction between vertical and horizontal differentiation in intra-industry trade data is a better way to handle the problem of measuring the impact of trade on labor markets. The following example illustrates how trade impact may be misjudged because of a lack of information about vertical differentiation (and sectoral composition).

Usually, the conventional factor content of trade calculations are carried out by using trade and industry data at 3 digits. Suppose that at this level of aggregation the share of IIT in total trade is 60%; conventionally, only 40% of total trade (inter-industry trade) has an impact on labor markets. But if 30% of total trade is vertical IIT (half of the overlap involves 2-way trade flows of different qualities), the share of total trade inducing effects

¹² A model with these characteristics has been suggested by Alasdair Smith (1996).

¹³ But this also implies that any lock-in phenomenon (increasing returns, distributional effects, market size) is likely to be translated into the labour market; see Hanson (1997).

¹⁴ All results reported in this section are part of Celi's Ph.D. research project at Sussex University.

on labor markets increases to 70%. This latter percentage would probably increase further if the IIT index was calculated at a greater level of desegregation, given that the share of inter-industry trade usually increases with a narrower definition of the products traded.

Following the logic of the above example, we calculated IIT indices by distinguishing vertical and horizontal components in the case of Italy. In addition, we compared IIT indices calculated respectively at the 3 and 8 digit level in order to evaluate the distortion due to sectoral composition.

The methodology used to disentangle horizontal and vertical IIT was based on the approach suggested by Greenaway, Hine and Milner (1994, 1995). These authors - following Abd-el-Rahman (1991) - decompose the unadjusted Grubel-Lloyd (G-L) index in vertical and horizontal IIT by using information deriving from unit values calculated at the 5-digit level (according to SITC)¹⁵. Recourse to unit values (UV) of exports and imports is a way to collect information about the quality of traded goods. In our calculations, unit values are computed according to a very narrow 8-digit definition of product.¹⁶

The criterion used to discriminate between the two components of IIT was the inclusion in the numerator of G-L index of only the trade flows of those product categories whose unit value of exports relative to the unit value of imports is outside (or within) a certain range of variation ($\pm 15\%$). Where the absolute value of the difference between the unit values for exports and imports was more (less) than 15%, the share of vertical (horizontal) IIT was obtained.¹⁷

¹⁵ An alternative method of disentangling horizontal and vertical IIT is suggested by CEPIL(1995)

¹⁶ The controversial aspects of the use of UV as a proxy of prices are well-known in the literature. In the present context, however, considering that UVs are related to 8 digit level categories, the risk of distortions caused by aggregation is ruled out.

¹⁷ If c denotes all 8 digit level product categories in manufacturing industry, the Grubel-Lloyd IIT index is:

$$(1) \quad IIT = 1 - \frac{\sum_c |X_c - M_c|}{\sum_c (X_c + M_c)}$$

where X_c and M_c denote the value of exports and imports respectively. The index (1) can be rearranged as:

$$(1b) \quad IIT = \frac{\sum_c (X_c + M_c) - \sum_c |X_c - M_c|}{\sum_c (X_c + M_c)}$$

The numerator of index (1b) can be recalculated by considering only those categories in which the absolute value of the difference between the UV for exports and imports is greater than 15%; that is, $1.15 < UVX_c / UVM_c < 1.15$.

Consequently, index (1b) becomes the share of vertical intra-industry trade in total trade:

$$(2) \quad VIIT = \frac{\sum_{cv} (X_{cv} + M_{cv}) - \sum_{cv} |X_{cv} - M_{cv}|}{\sum_c (X_c + M_c)}$$

Finally, the same procedure can be adopted to obtain the share of horizontal intra-industry in total trade. In this case the numerator of the index is calculated by considering the items where $0.85 < UVX_c / UVM_c < 1.15$; that is, those residual categories where quality differences between exports and imports are not very pronounced. The result is:

$$(3) \quad HIIT = \frac{\sum_{ch} (X_{ch} + M_{ch}) - \sum_{ch} |X_{ch} - M_{ch}|}{\sum_c (X_c + M_c)}$$

Under the above assumptions, it is natural that:

$$(4) \quad IIT = VIIT + HIIT$$

Total IIT, vertical IIT (VIIT) and horizontal (HIIT) indices were calculated in the case of Italian trade with less advanced countries in 1993. The results, reported in table (1), show that the VIIT is the dominant part of intra-industry trade. In addition, the refinement made to calculation by moving from 3 digits to 8 digits implies a lower share of IIT in total trade. Both these results suggest that in the case of Italy the risk of understating the labor market effects of trade is real if vertical differentiation and sectoral aggregation are not considered adequately.

Table 1. Indices of Intra-Industry trade for Italy. Trade with LAC (less advanced countries). 1993^a

	IIT 3-digit	IIT 8-digit	VIIT 8-digit	HIIT 8-digit	
	41%	20%	15%		5%

Memoranda

Total value of exports involved : **24,931,490 ECU**

Total value of imports involved : **9,814,056 ECU**

Number of 3-digit sectors considered : 66

Number of 8-digit products considered : 5,435

(a) Grubel-Lloyd indices are expressed as shares of total trade

Source: our calculations on Comext data

The following table based on the above results summarizes the underestimation of the part of trade involved in factor market effects when FCT calculation for Italy is carried out at the 3-digit level without considering vertical product differentiation.

Table 2. The share of Italian trade involved in labor market effects. Trade with LAC. 1993

<i>Labour market effects in conventional FCT calculation</i>	
·	1-way trade 3-digit: 59%
<i>Labour market effects not included in conventional FCT calculation</i>	
·	1-way trade 8-digit (which is 2-way at 3-digit): 21%
·	Vertical 2-way trade (8 digit): 15%
<i>No labor market effects</i>	
·	Horizontal 2-way trade (8-digit): 5%

Source: our calculations on Comext data

The table shows that the underestimation due to a too high level of aggregation involves 21% of total trade, while the percentage of underestimation associated with the absence of information about vertical product differentiation is 15%. Thus, the total distortion involves a percentage of 36%, a quite substantial fraction of total trade.¹⁸

In conclusion, this evidence suggests that in the case of Italy product heterogeneity matters, and that calculations of the factor content of trade should take this aspect into account.

We were prompted by the above evidence to try a preliminary experiment where we sought to compare results from 3-digit FCT calculation (conventional procedure) and those from 8-digit computation. The two factors considered were skilled and unskilled labor. In the case of 3-digit calculation, the availability of industry data (INDE data set with sectors defined according to NACE) enabled us to obtain input coefficients: the proxy for the skilled labor (unskilled labor) coefficient was obtained as the ratio between non manual workers (manual workers) and turnover. Unfortunately, at the 8-digit level no industry data were available. We therefore adopted the following estimate procedure based on unit values of trade flows in order to compute input coefficients at the 8-digit level.

We first carried out a cross-sector regression at the 3-digit level in order to verify whether unit values (a proxy for quality) could explain skill intensity; we estimated the following equations :

$$\begin{aligned} SKY &= \alpha_0 + \alpha_1 LUVXW \\ UNY &= \alpha_0 + \alpha_1 LUVXW, \end{aligned}$$

where :

SKY = 3-digit skilled labor coefficient (non manual workers/turnover)

UNY = 3-digit unskilled labor coefficient (manual workers/turnover)

LUVXW = log of unit value of export at 3-digit level¹⁹

The estimated equations²⁰ were the following:

$$\begin{aligned} SKY &= 2.004 + 0.31170 LUVXW & R^2 &= 0.31 \\ (9.97) & & (5.49) & \end{aligned}$$

¹⁸ Note that these results suggest that, in the end, the proportion of trade not involved in factor market effects is very small: 5% of total trade (horizontal intra-industry trade).

¹⁹ Note that the regressor expressed at the 3-digit level is a weighted mean of unit values for all 8 digit product categories included in the 3-digit sector. Therefore information at 8-digit is not lost at 3-digit.

²⁰ Regressions were carried out on data for Germany. In some recent studies the use of UV defined at a very high degree of sectoral desegregation produces significant results as indicators of human capital, and in the study of international comparative advantages relative to product quality. See D.Greenaway and J.Torstensson (1997) and M.Landesmann and J.Burstaller (1996).

$$\text{UNY} = 5.5672 + 0.37608 \text{ LUVXW} \quad R^2 = 0.11$$

(5.57) (2.85)

The constant term and the LUVXW coefficient show an acceptable level of significance²¹. Hence, if there is a statistically significant association between skill intensity and unit values at 3 digits, and if we assume that this relationship also holds at 8 digits, we can use the above-estimated equations to obtain 8-digit SKY and UNY via 8-digit unit values.

We performed this numerically-intensive exercise and calculated, by means of inferred input coefficients, the factor content of Italian trade with LAC at 8 digits. Although this calculation was based on an inference whose robustness must be tested, the approach was an attempt to capture trade-induced intra-sectoral substitution between products with different skill contents. The comparison between the results obtained using this approach and those associated with the 3-digit conventional method may be useful to ascertain whether, in the case of Italy, heterogeneity influences the impact of trade on labor markets. Table 3 sets out the evidence associated with the two alternative procedures.

Table 3. Factor content of Italian trade with LAC. Comparison between 3-digit and 8-digit results. 1993

	Skilled/Unskilled ratio in exports	Skilled/Unskilled ratio in
imports		
3-digit level	0.3918	0.2871 ^a
8-digit level (4166) ^a	0.4343	0.4137

Memoranda

Total value of exports involved: **24,931,490 ECU**

Total value of imports involved: **9,814,056 ECU**

Number of 3 digit sectors considered: 66

Number of 8 digit products considered: 5,435

(a) By using input coefficients of Italian exports

Source: our calculations on Comext and Inde data sets

Table 3 shows that at the 3-digit level Italian exports are more skill-intensive compared with imports from the LAC area. Moving from 3 digits to 8 digits, the skilled/unskilled ratio becomes larger for both flows.

Although our exercise suffers from the limitations of a crude FCT calculation with no price factor adjustments and other more sophisticated general equilibrium effects, it nevertheless suggests that product heterogeneity matters and that any accurate study of the trade impact on labor markets should consider the importance of this aspect.

²¹ In the UNY regression there is a positive coefficient associated with LUVXW; in addition, the constant term is greater than in the SKY estimated equation. This result is not misleading, given that there is a significant positive relationship between LUVXW and SKY/UNY ratio (regression not reported in the paper).

5. Regional Differences in Skill Composition of Italian Wage-Employment

In this section we utilize the INPS data set to identify the characteristics of skill upgrading by industry and by geographical area²². In section 6, the same data will be used to measure the factorial content of trade flows.

This data set contains data on employment and average wages for 2-digit ATECO industries desegregated by firm size, by age and gender and by geographical location, and it distinguishes among four occupational categories (apprentices, manual workers, clerical workers and managers) which can be aggregated in two qualification groups (the aggregations are called blue- and white-collars in this paper: BC and WC. 1 and 2 refer to the higher-skilled level (1) and lower-skilled level (2) in each group). In addition to the usual ratio between white- and blue-collar workers ($WB = WC/BC$), other indicators of the skill levels within the two broad occupational categories are used here: BC1 and WC1 are defined as the share of the highest-skilled blue and white collars with respect to total blue- and white-collar employment (see Tab. 4).

Identifying the skill levels of workers is always a problem in empirical work: occupational distinctions are often crude and probably misclassify too many workers. The worry is that such misclassifications are the rule rather than the exception, that is, using either non production-production or white-collar-blue collar to categorize²³ skill levels misplaces an unacceptably high number of people.²⁴

5.1 The Move Towards White-Collar Labour as Skill Upgrading: Aggregate Results for the Manufacturing and Service²⁵ Sectors

The phenomenon of skill upgrading appears to have been of substantial magnitude in years 1988-1994 in the Italian manufacturing sectors, as shown by the increase in the WB ratio due to a widespread increasing share of skilled and a decreasing share of unskilled workers—and by the change in the skill composition in both blue- and white-collar employment (Table 4).

The manufacturing sector displays a clear pattern of skill upgrading over the period 1988-94. The increase in the white-collar/blue-collar ratio amounted to 5½ percentage points at the national level. This was the result of a common tendency in all three broad geographical areas, North, Center and South. The change in this indicator was more pronounced in absolute level in the North, although in percentage terms it was stronger in the South.

²² For a recent theoretical analysis of skilled-unskilled labor markets see Gregg-Manning(1997)

²³ Utilized respectively in the U.S. *Annual Survey of Manufactures* and *Current Population Survey*.

²⁴ But quite often the conclusion considers that non-production workers as well as white-collar workers are more skilled than production or blue-collar workers.

²⁵ The analysis of employment in service sectors is carried out for the geographical aggregates mainly because of the likely different compensatory role of the wage employment in these Italian sectors in some periods. The results should be evaluated with respect to the displacement effect in manufacturing sectors. Anyway, the following section 6 considers only traded goods but non tradable could have had an important role for the impact of trade on wages. On this aspect see the simulations in Rowthorn(1995).

At the local level, three main differences emerge between the North and the South.²⁶ First, the share of white collars on total employment was markedly higher in the North (approx. 28% in North and 20% in South in 1994) reflecting a bias towards the production of goods with higher technological content.

Second, there was a more pronounced response by employment in the North than in the South, where the indicators resembled those recorded in the North with different intensities.

Finally, the upskilling mechanism involved different classes of workers in the two areas. For instance, in the North, skill upgrading resulted in relatively stable shares of managers and clerical workers on skilled employment, an increasing share of manual workers and a significant decline of apprentices on unskilled employment. In the South, two classes of workers increased significantly, and these were clerical and manual workers but with different intensities (+0.7%) with respect to the North(+2.2%). At the same time, the share of apprentices fell dramatically over the period with higher intensities in the North of the country.

The correlation coefficients (see table 5) confirm this pattern of skill upgrading, and they highlight how upgrading penalizes the extreme classes, WC1 and BC2, both at aggregate levels and in the North. The coefficients for South warrant closer attention, since they show that the share of clerical workers of total employment in the Southern upskilling process was more closely correlated with WB than the share of managers, thereby confirming the role of this group in the Southern upskilling process.

In conclusion at the aggregate level skill upgrading in the manufacturing sector has essentially involved an increasing share of skilled workers on total employment (with an higher increase in the South mainly due to the an increasing share of clerical workers) and a decreasing share of unskilled workers (with an higher decrease in the North mainly due to the strongest decrease in apprentices). There is no clear evidence that the South is catching up or that the skill composition of employment in the two geographical areas has begun to converge to a common level.

As regards service sectors (tab. 6), skill upgrading was the result of diverging changes in the extreme classes of employment. The share of the highest-skilled white collars increased, while apprentices showed a sharp fall in their share of employment. The feature that service industries have in common with manufacturing is the markedly higher skill intensity of employment in the North, which is reflected in a difference in the values for WB in the North and in the South of more than 40 percentage points over the whole period of analysis.

Again, analyses of local tendencies reveal different patterns in employment dynamics in the areas examined, as confirmed by the correlation coefficients (table 7). At the national level the positive signs of the correlation of WC1 and BC1 with WB are in line with an increase in managers and a reduction in apprentices. In the North, the signs of the correlation of WC1 and BC1 confirm that the central classes of employment have

²⁶ Some of the following observations refer to the analysis by relative shares on total employment. Results are not reported in the text but are available in Celi-Segnana (1998), Skill and Wage-Employment in Northern and Southern Italy, mimeo

benefited from skill upgrading. Finally, as expected, WC1 displays the only positive and significant correlation in the South.

Table 4. Skill indicators of employment in manufacturing sectors

Italy	BC1	WC1	WB	Center	BC1	WC1	WB
1988	92.31%	5.32%	30.02%	1988	92.14%	4.70%	27.64%
1991	92.26%	5.12%	32.95%	1991	92.24%	4.78%	31.69%
1992	93.07%	5.26%	34.01%	1992	93.02%	5.00%	32.40%
1993	94.09%	5.25%	35.26%	1993	93.99%	4.81%	32.28%
1994	94.13%	5.16%	35.55%	1994	94.00%	4.72%	34.45%
North				South			
1988	92.07%	5.77%	32.68%	1988	93.54%	3.14%	20.92%
1991	92.33%	5.50%	35.64%	1991	91.99%	3.14%	22.84%
1992	93.19%	5.65%	36.87%	1992	92.60%	3.16%	23.99%
1993	94.20%	5.62%	38.50%	1993	93.71%	3.52%	25.27%
1994	94.14%	5.63%	38.40%	1994	94.20%	2.85%	25.01%

Source: our calculations on INPS data (Osservatorio sui lavoratori dipendenti)

Table 5. Skill indicators: correlation coefficients in manufacturing sectors (1988-1994)

Italy		BC1	WC1	WB
	BC1	1,000		
	WC1	-0,117		
	WB	0,860	-0,502	1,000
North				
	BC1	1,000		
	WC1	- 0,124	1,000	
	WB	0,931	- 0,456	1,000
South				
	BC1	1,000		
	WC1	-0,137	1,000	
	WB	0,318	0,139	1,000

Source: our calculations on INPS data (Osservatorio sui lavoratori dipendenti)

The main features to emerge from the analysis of the service sectors are:

- the polarization of the skill intensity, which is much higher in the North than in the South of Italy, with a widening gap between the two areas;
- the diminishing share of apprentices on total employment, homogeneously spread;
- the different patterns of skill upgrading in the two areas, which concentrates in the central classes in the North and in managers in the South;

Table 6. Skill indicators of employment in service sectors

Italy	BCI	WCI	WB	Center	BCI	WCI	WB
1988	92.57%	2.02%	107.82%	1988	92.97%	2.06%	116.29%
1991	91.66%	1.85%	113.08%	1991	92.64%	1.93%	118.07%
1992	92.37%	2.07%	115.11%	1992	93.31%	2.39%	118.25%
1993	93.41%	2.14%	116.67%	1993	94.27%	2.37%	119.78%
1994	94.17%	2.11%	116.02%	1994	94.97%	2.32%	118.92%
North				South			
1988	91.50%	2.08%	118.26%	1988	94.59%	1.78%	76.99%
1991	90.54%	1.98%	124.65%	1991	93.25%	1.31%	83.04%
1992	91.31%	2.00%	128.80%	1992	93.79%	1.89%	82.98%
1993	92.49%	2.03%	130.36%	1993	94.62%	2.20%	84.14%
1994	93.37%	1.94%	129.00%	1994	95.20%	2.40%	84.63%

Source: our calculations on INPS data (Osservatorio sui lavoratori dipendenti)

These empirical observations show a shift towards white-collar labor with group-specificity (changes in the central or extreme classes), local specificities (classes differently involved in the North and South), and industry-specificity (differences in North/South levels of skill indicators show a gap of approx. 40 percentage points in service and of approx. 10 percentage points in manufacturing).

Table 7. Skill indicators: correlation coefficients in service sectors (1988-1994)

Italy	<i>BCI</i>	<i>WCI</i>	<i>WB</i>
<i>BCI</i>	1,000		
<i>WCI</i>			
<i>WB</i>	0,829	1,000	
North			
<i>BCI</i>			
<i>WCI</i>	1,000	-	
<i>WB</i>	0,266	1,000	
South			
<i>BCI</i>			
<i>WCI</i>	1,000		
<i>WB</i>	0,884	1,000	
	0,002	0,373	1,000

Source: our calculations on INPS data (Osservatorio sui lavoratori dipendenti)

Therefore the characteristics of upskilling differ in nature, in levels and in geographical concentration. Indeed, this is a rather complex phenomenon that allows only a conclusive remark: the nature of skill upgrading is locally diversified as well as by size. In the years

1988-1994 the size of the widening gap in services was probably its most distinctive feature.

5.2 Skill Upgrading at Industry Level: within or between?

At the industry level ²⁷it emerges that the skill level of employment is higher in the North than in the South of Italy. This feature is particularly marked in the service industry, but it is homogeneously spread across sectors. Somewhat puzzling is the lack of any clear pattern of skill upgrading at the industry level, either in the North or in the South, and of a clear link between the level and the percentage change of the skill indicators under examination. Checking the correlation between the percentage change of the skill indicators and their initial level within each sector reveals quite a fragmented picture (table 8). A positive correlation of the percentage change of the skill indicators with their initial levels would imply a further concentration of skills in those sectors that were already skill intensive. However, the reported correlations for the whole economy, (19 sectors) level are negligible at national level, and interestingly two of them have opposite signs in the North and in the South.

If attention is restricted to manufacturing and service sectors only, one notes a sharp increase in the size of the correlations. This feature is clear for the manufacturing sectors where skill upgrading had the main impact. Moreover, the positive signs of the correlations of two indicators for the Northern manufacturing sectors suggest that upgrading has involved the concentration of skills in those sectors which were already skill intensive. In addition, the size of the correlation is usually larger in the North than in the South, suggesting that the concentration of skills has been stronger in the North. On the other hand, the signs of the correlations found in the South would suggest a tendency towards a more homogeneous distribution of skills. This evidence once again confirms the existence of different patterns in skill upgrading dynamics in the two parts of the country, even at the industry level.

We may therefore conclude that, even though there is no clear-cut tendency towards further concentration of the skill content of employment at the national level, this phenomenon is evident overall in the North of Italy and in Southern manufacturing industry. As we have seen, the difference in the skill content of employment between the North and the South of Italy has increased, particularly in the service sector.

Among the explanations offered in the literature of the 'between-within' effect, the increase in international trade would work primarily by shifting the demand for labor between industries from those intensive in blue-collar workers to those intensive in white collars, while biased technological change would shift the skill composition of labor demand within industries. For this reason, a decomposition of the increase in the white-collar fraction of total employment (or the wage bill) into shifts occurring within and

²⁷ The *legenda* for sectors according to INPS data base is the following: 01 Energy 02 Minerals 03 Non metal. Minerals 04 Chemical products 05 Metal products and machinery 06 Electronic and precision equipment 07 Motor vehicles and other transport equipment 08 Food, beverages and tobacco 09 Textile, leather, clothing and footwear 10 Wood and wooden furniture 11 Paper, printing, publishing, rubber and plastics 12 Other manufacturing 13 Construction 14 Trade, hotels and repairs 15 Transports 16 Communication 17 Finance intermediation and insurance 18 Real estate and business services 19 Personal services. In section 5 sectors 5-12 are the manufacturing industry and 14- 19 the service industry.

between industries is usually interpreted as indicative of the source of changes in labor demand.²⁸

Table 8. % Change-Level Correlation in Skill Indicators (1988-1994)

	BC1sectors	<i>Italy</i>	<i>North</i>	<i>South</i>
<i>1-19</i>		-0,072	0,226	-0,416
<i>5-12</i>		-0,780	-0,759	-0,695
<i>14-19</i>		0,230		-0,223
			0,487	
WC1				
<i>1-19</i>		-0,140	0,262	-0,148
<i>5-12</i>		0,721	0,472	-0,774
<i>14-19</i>		0,492	0,704	0,084
WB				
<i>1-19</i>		0,159	0,141	0,209
<i>5-12</i>		0,747	0,561	0,446
<i>14-19</i>		0,066	0,033	0,137

Source: our calculations on INPS data (Osservatorio sui lavoratori dipendenti)

Table 9 sets out the results of the ‘between-within’ analyses for employment and the wage bill run at the national level, in the North and in the South of Italy, for all sectors, manufacturing sectors, and service sectors respectively. The size of the effects found is small, usually in the range (-1%,+2%) for employment, and slightly larger for the wage bill. However, the scale of these figures is in line with that reported in Berman *et al.* (1994). At the **aggregate level**, the between and the within components for white-collar employment have the same positive sign, and hence reinforce each other, at both the national level and in the geographical areas considered. The size of the components shows that the between component was more important in all areas.

At the **industry level**, the situation is quite different. First, the size of the change is significantly smaller. This applies to both the manufacturing and the service industries, and at the national level as well as in the geographical areas. This is mainly due to a much smaller between component, partially off-set by an increase in the size of the within component in the manufacturing sectors. Hence, at the industry level, one notes a difference in the dynamics of skill upgrading. On the one hand, the process in the manufacturing sectors is driven primarily by biased technological change, while on the other, compositional shifts play a dominant role in the service sectors. These differences between industries are even more evident when we consider the situation by **geographical area**. In the manufacturing industry we find that in both parts of the country, the within component predominates. The relative size of the total change is slightly larger in the North than in the South, owing to a strong within component in the North. On the other hand, the between component is larger in the South, which once again reveals a difference

²⁸ It is well known that a standard decomposition of the change in an aggregate proportion into a term reflecting the reallocation of employment between industries and another reflecting changes of proportions within industries results in a first term reporting the change in the aggregate proportion of white collars attributable to shifts in employment shares between industries with different proportions of white collars and a second term reporting the change in the aggregate proportion attributable to change in the proportion of white collars within each industry.

between the two parts of the country within the same industry. While the North seems to be more sensitive to technological innovation, the South seems more responsive to demand shifts.

Analysis of the service industry at the local level shows that the national figures result from a compensation between the tendencies in the North and in the South. The dominant role of the between component found at the national level is in fact due to the situation in the South, where this component is markedly higher than in the North. Similarly, the limited weight of the 'within' component at national level arises as a consequence of its negative impact in the South. We may therefore say that while in the North sectoral shifts and technological change have had a similar impact on the demand for skilled labor, the South of Italy has been primarily influenced by sectoral shifts.

In conclusion, the 'between-within' analysis has revealed the following features:

- the dominant role of compositional shifts in explaining, at the aggregate and national level, the change in demand for skilled labor;
- the within effect is dominant whenever manufacturing industry is taken into account, showing that this industry is led by technological change, while the service industry is led by sectoral change;
- the North is always relatively more sensitive to changes in technology, and the South relatively more sensitive to changes in demand.

Again, our results²⁹ for the 'between/within' decomposition" show that, even though the 'between-industry' component predominates over the 'within-industry' component in the period 1988-1994 (a finding consistent with a dominant role of demand in explaining the increased share of white-collar employment), the results by industry and by geographical aggregate are rather different, highlighting the strength of the within effect in manufacturing and the Northern dominance in the North-South gap.

This evaluation by industry and by area obtains encouraging results in identifying the regional differentiation of Italian industry if sectors are significant units of analysis. But the results are less encouraging if we wish to utilize them for a balance of the traditional 'between-within' debate: the strong between effect identified at the national and aggregate level derives from service sectors, the less tradable among tradable, so that it would be rather implausible to draw a conclusion about a dominant role for factors that shift product demand (trade) relied upon non-tradable sectors (services). Hence difficulties arise not only from the serious aggregation problem associated with these results but also from the sectoral perspective used.

Concerning **aggregation**, here too heterogeneity can play an important role as well. We have already noted that, for instance in the 'between-within' composition of the rise in the share of white-collar workers, aggregating industries increase the relative importance of the "within component", especially when there are large differences in labor utilization within industries; hidden demand composition effects due to heterogeneity may play an

²⁹ See Berman et al. (1994) for empirical evaluation for the U.S.A and Quintieri B.-Rosati (1995) in Quintieri B. (1995) (ed. by), pp. 148 for an aggregate evaluation for Italy, where the dominant role of the within effect is evaluated at the aggregate level; the Italian case is also investigated by Cipollone P.-Sestito P. (1997)

important role, one which in a more desegregated evaluation would result in a much higher ‘between effect’. As Berman *et al.*(1994) find, the ‘between effect’ explains 39% of the shift in the employment share at the four-digit level and only 15% at the two-digit level, a difference that is not identifiable at our - too aggregate - level of analysis. Hence, in this case as in that of the trade flows discussed in section 4, aggregation matters.

Table 9. Industry decomposition of the variation in the share of skilled workers (years 1988-1994)

	Employment		Wage bill		
	Between	Within	Between	Within	
National Level					
<i>All Sectors</i>	WC	1.651%	0.878%	1.826%	3.487%
	<i>Total</i>		2.529%		5.313%
<i>Sectors 05-12</i>	WC	0.507%	1.041%		
	<i>Total</i>		1.548%		
<i>Sectors 14-19</i>	WC	0.596%	0.144%		
	<i>Total</i>		0.740%		
North of Italy					
<i>All Sectors</i>	WC	1.341%	1.043%	1.453%	3.713%
	<i>Total</i>		2.384%		5.166%
<i>Sectors 05-12</i>	WC	0.295%	1.225%		
	<i>Total</i>		1.520%		
<i>Sectors 14-19</i>	WC	0.432%	0.498%		
	<i>Total</i>		0.930%		
South of Italy					
<i>All Sectors</i>	WC	2.302%	0.423%	2.903%	3.042%
	<i>Total</i>		2.726%		5.945%
<i>Sectors 05-12</i>	WC	0.631%	0.747%		
	<i>Total</i>		1.379%		
<i>Sectors 14-19</i>	WC	0.985%	-0.258%		
	<i>Total</i>		0.726%		

Source: our calculations on INPS data (Osservatorio sui lavoratori dipendenti)

Concerning the **sectoral** perspective, these results certainly do not allow any conclusion to be drawn about the move along the quality spectrum: they simply identify a stronger within effect in Northern manufacturing industries as the most important reason for skill upgrading. Therefore, whenever the perspective is sectorally based, these results show that that traditional explanation based on technological change is important. **But if the perspective is intrasectoral, these results are compatible with a ‘within effect’ which can proxy a movement along the national quality spectrum (where the bottom is in Italian services) that is especially marked in the Northern areas.**

6. Regional Differences in the Impact of Trade

In section 4, data on the skill content of Italian trade flows with respect to LACs showed an higher skill content for exports than for imports. At the same time, in section 5, the data on the Italian labor market showed not only a persistent difference in skill levels between the North and the South but also that skill upgrading has affected Northern manufacturing industries much more than Southern sectors. This implies that the likely displacement effect of trade flows with LACs on unskilled labor³⁰ will occur at different intensities in the two areas of the country.

Proper evidence is required on this aspect, but it is likely that the displacement effect of trade on unskilled workers is more severe in the North. In order to verify this hypothesis, we calculated the factor content of trade flows for the two areas of the country.³¹

Before looking at trade with LACs, it is useful to have a preliminary overview of regional differentiation in the factor content of Italian trade by considering the flows with the rest of the world (total trade) set out in table 10.

The evidence reported in this table shows the following three features: (i) the skilled/unskilled ratio is higher in imports than in exports for both areas of the country; (ii) the skilled/unskilled ratio is significantly higher in Northern flows than in Southern flows; (iii) skill content increases over time for both imports and exports with a widening gap (between imports and exports) for the Southern area and a shrinking one for the Northern area.

This preliminary result is in line with the consolidated idea that Italian specialization is more oriented towards traditional consumption goods compared with the other advanced economies.³²

In any case, the skill content of trade flows is very different in the two areas of the country. This finding is understandable, given the considerable difference between the North and the South in the level of the WB ratio (a difference already shown in the previous analysis of the Italian labor market). An important methodological point is that in table 10 we carry out a conventional FCT calculation by using the same factorial coefficients for both exports and imports;³³ this creates a distortion which tends to reduce the difference between imports and exports in skill content; this distortion is probably greater for Southern flows because we would expect a larger gap in skill content between Southern productions and goods imported from the rest of the world. Nevertheless, analysis of FCT over time suggests that the skill content of Southern productions is progressively diverging from the world standard, whereas Northern productions converge on it.³⁴

³⁰ Econometric attempts to explain changes in skill intensity show that the coefficient on the rise in import penetration in each sector is highly significant and large enough to account for up to one-third of the increase in the average skill intensity of manufacturing during 1979-1987. See Feenstra-Hanson (1995), Berman-Bound -Griliches (1994).

³¹ In regional FCT calculations, the proxy for the skilled labour (unskilled labour) coefficient in each sector is obtained as the ratio between white collars (blue collars) and added value.

³² In effect, if we inspect the correlation across sectors between WB index and the trade balance with the rest of the world (TBW) we find a significant negative coefficient. This negative linkage between WB and TBW is stronger in the South of the country, as indicated by the size of the correlation coefficient (our calculation, not reported in the paper).

³³ In conventional FCT calculation, the factor content of imports is computed using input coefficients of domestic economy.

³⁴ If we assume the same factorial coefficients for both imports and exports in order to calculate FCT, it is evident that a difference between imports and exports in the dynamics of the skilled/unskilled ratio is entirely due to a trade composition effect.

Table 10 - Regional differentiation in factor content of Italian trade with the rest of the world.

	skilled/uns skilled <u>ratio in import</u>	skilled/uns skilled <u>ratio in export</u>
<i><u>North</u></i>		
1988	0,394	0,350
1991	0,426	0,384
1992	0,442	0,399
1993	0,463	0,423
1994	0,457	0,420
<i><u>South</u></i>		
1988	0,248	0,225
1991	0,287	0,255
1992	0,298	0,274
1993	0,290	0,256
1994	0,290	0,255
<i><u>Centre</u></i>		
1988	0,357	0,254
1991	0,408	0,300
1992	0,395	0,309
1993	0,391	0,314
1994	0,394	0,334
<i><u>Italy</u></i>		
1988	0,362	0,315
1991	0,398	0,349
1992	0,409	0,362
1993	0,422	0,378
1994	0,420	0,380

Source: our calculations on Prometeia-Istat data (Statistiche del commercio con l'estero and Cont. and INPS data (Osservatorio sui lavoratori dipendenti)

When we turn to the trade flows with less advanced countries in table 11, the previous picture is reversed.

Table 11 -Regional differentiation in factor content of Italian trade with LACs.

	skilled/unskilled <u>ratio in import</u>	skilled/unskilled <u>ratio in export</u>
<i><u>North</u></i>		
1988	0,311	0,399
1991	0,332	0,420
1992	0,346	0,426
1993	0,367	0,449
1994	0,364	0,443
<i><u>South</u></i>		
1988	0,215	0,267
1991	0,246	0,285
1992	0,235	0,276
1993	0,230	0,256
1994	0,222	0,248
<i><u>Centre</u></i>		
1988	0,222	0,330
1991	0,264	0,372
1992	0,276	0,359
1993	0,277	0,366
1994	0,272	0,380
<i><u>Italy</u></i>		
1988	0,275	0,367
1991	0,297	0,390
1992	0,309	0,391
1993	0,322	0,407
1994	0,319	0,405

Source : our calculations on Prometeia-Istat data (*Statistiche del commercio con l'estero and Contabilità regionale*) and INPS data (*Osservatorio sui lavoratori dipendenti*)

Now the skill/unskilled ratio is lower in imports than in exports for both areas. But the gap in skill content between imports and exports is more pronounced in the North than in the South, and upgrading over time characterizes only Northern exports while Southern exports downgrade.³⁵ The decline in the skilled/unskilled ratio in Southern exports between 1988 and 1994 in conjunction with a slight increase in the same ratio in Southern imports from LACs indicates the progressive convergence of Southern Italy's international specialization on the specialization of LAC's exports.³⁶

Therefore, the evidence reported in table 11 suggests on the one hand that Southern productions are more exposed than Northern productions to competition by LACs, and on

³⁵ Note that the decline of the skilled/unskilled ratio in Southern exports began in 1992. The effects of the 1992 devaluation of the lira should probably be taken into account when explaining the evolution of Southern specialization towards less skill-intensive sectors.

³⁶ This evidence is also confirmed by correlations across sectors between the WB index and the trade balance with LACs (TBL). In this case, the different patterns of Southern and Northern trade are well reflected in a significant negative coefficient for the South and a very small linkage for the North (our calculation, not reported in the paper). On the one hand, the significant correlation for the South testifies to the existence of competition between Southern Italy and LACs in the same low skill productions; on the other, the insignificant correlation for the North shows complementary trade flows between Northern Italy and LACs.

the other that the trade-induced displacement effects on unskilled labor demand operate principally in North Italy (considering the complementary nature of trade flows between the North and LACs).

Table 12 - Regional differentiation in factor content of Italian trade with LACs.

	skilled/unskilled ratio in import		skilled/unskilled ratio in export	
<i>North</i>				
1985 ^(a)	0,316	(0.186) ^(d) (0.282) ^(e)	0,388	(0.365) ^(e)
1996 ^(b)	0,370	(0.226) ^(d) (0.334) ^(e)	0,443	(0.419) ^(e)
1985-96 ^(c)	0,343	(0.212) ^(d) (0.310) ^(e)	0,423	(0.399) ^(e)
<i>South</i>				
1985 ^(a)	0,237	(0.313) ^(e)	0,274	(0.369) ^(e)
1996 ^(b)	0,217	(0.306) ^(e)	0,250	(0.365) ^(e)
1985-96 ^(c)	0,228	(0.308) ^(e)	0,264	(0.369) ^(e)
<i>Centre</i>				
1985 ^(a)	0,230		0,334	
1996 ^(b)	0,282		0,372	
1985-96 ^(c)	0,258		0,356	
<i>Italy</i>				
1985 ^(a)	0,278		0,358	
1996 ^(b)	0,325		0,405	
1985-96 ^(c)	0,303		0,387	

(a) = Factor content of 1985 trade flows with factor coefficients referred to 1988.

(b) = Factor content of 1996 trade flows with factor coefficients referred to 1994.

(c) = Factor content of cumulated annual trade flows of the period with factor coefficients as mean of the following available years: 1988, 1991, 1992, 1993, 1994.

(d) = Factor content of North imports calculated by using South's factor coefficients.

(e) = Factor content of trade calculated by using Italy's factor coefficients.

Source: our calculations on Prometeia-Istat data (*Statistiche del commercio con l'estero and Contabilità regionale*) and INPS data (*Osservatorio sui lavoratori dipendenti*)

This latter result is borne out if we depart from conventional FCT computation and adopt a Wood-type approach by assuming different factorial coefficients for imports and exports respectively.³⁷ In particular, if we utilize the Southern input coefficients as a proxy for the LACs' coefficients in order to estimate the factorial content of Northern imports from LACs, we note in table 12 that the skilled/unskilled ratio in imports decrease remarkably, amounting to one half of the exports ratio.³⁸

³⁷ A.Wood contests conventional FCT studies, arguing that these studies, by using the factorial coefficients matrix of developed countries as estimator of factor content for both imports and exports, have underestimated the unskilled labour content of LACs exports to developed countries. Consequently, they have undervalued the displacement effect of the developed countries' trade with LACs on unskilled labour demand in developed countries.

³⁸ Compare import ratio in (d) bracket and export ratio not in brackets in table 12. In the same table, we carried out another experiment by calculating FCT using the same national (Italy) input coefficients for both North and South. The aim of the experiment was to isolate any differences between the North and South in FCT entirely due to the sectoral composition of trade and not to input coefficients. The results, in bracket (e), are interesting, since they show that the sectoral composition of Northern

This outcome suggests that if the actual LACs' coefficients were utilized in FCT calculation, the trade impact on the demand for unskilled labor in the North would be probably much higher.

7. Conclusions

With reference to Italy, we studied the role of trade in changing the skill composition of employment in recent years. Two specific elements were investigated: vertical and regional differentiation.

With respect to the former element, we found that vertical product differentiation dominates in Italian intra-industry trade. Consequently, the impact of IIT on labor markets proves not to be neutral in the case of the Italian economy. We calculated that the trade impact underestimation due to a lack of information about vertical product differentiation involves 15% of total trade. In addition, we pointed to another source of trade impact underestimation: a too high level of aggregation. By moving from a 3-digit to a 8-digit level of desegregation in our calculations, we found a substantial increase in inter-industry trade. This increase - involving 21% of total trade - is indicative of an undervaluation of trade impact due to a too high level of sectoral composition (3-digit, the level normally adopted in conventional FCT studies). Thus, the total distortion amounts to 36%, a quite significant fraction of total trade. This evidence suggests that as regards Italy product heterogeneity matters, and that any calculation of factor content of trade should take this aspect into account.

With respect to the second element, as far as skill upgrading by area was concerned, we started by noting its differences of level, which show a remaining difference in skill intensity between the North and the South of the country. However, at the industry level, the distance between skill indicators did not reveal any common tendencies, and the relationship between levels and changes in skill upgrading did not display any strong negative or positive correlation in the two areas.

The decomposition of the rise in the share of white-collar workers showed that the 'within-industry' component predominated over the 'between-industry' component in the period 1988-1994, whenever manufacturing industry is taken into account. A finding which shows that this industry is led by technological change.

This result reverses when service industry is considered. The results for geographical aggregates were rather different: in Southern Italy the 'within effect' was smaller in size than in Northern Italy, where the same effect apparently played a more substantial role, showing a North always relatively more sensitive to changes in technology, and a South relatively more sensitive to changes in demand.

We also noted that aggregating industries increase the relative importance of the 'within component' of the decomposition, especially when there are large differences of labor utilization within industries. Hidden demand composition effects due to heterogeneity

trade flows evolved in terms of skill upgrading between 1985 and 1996, whereas Southern trade flows evolved in the opposite direction.

may play an important role, one which in a more desegregated evaluation would result in a much higher 'between effect'. It is evident that heterogeneity is important for skill-biased technological change and displacement effects.

Finally, with respect to the two areas of Italy, we tested the relationship between trade and labor markets. When trade with LACs was considered, FCT calculation for the North and the South of the country quite clearly confirmed a trade impact differentiated by areas, with a larger trade-induced displacement effect on demand for unskilled workers in Northern Italy. This displacement effect is evident when the conventional procedure for FCT calculation is adopted. But it is much more pronounced if FCT computation is carried out adopting a Wood-type approach which assumes different input coefficients for imports and exports respectively. Furthermore, analysis over time of FCT shows on the one hand a skill upgrading of Northern productions, and on the other, the increasing vulnerability of Southern exports to competition by LACs. This regional difference in the factor content of Italian trade may also suggest a 'national' vertical labor division in which the North moves along the quality spectrum and the South specializes in productions of lower quality.

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The Transformation and Restructuring of the Financial Sector in the Transition Economies and the Search of a Model of Capitalism

Tatiana Houbenova-Delissivkova

Introduction

The transition economies of Central and Eastern Europe have had a diverse range of experiences in the development of the financial sector in the present decade. As a main trend of the transformation to market economy the monetarisation of the former socialist economies has played an important role in the growth of emerging markets and in the development of the financial sector. The different extent of economic liberalization in the transition economies under review has led to some divergencies in the course of financial sector reform and in the overall sustainability of the macroeconomic policies pursued in these countries. Thus Central and East European countries provide different opportunities and obstacles for the financial markets development and the capital mobility within and outside their boundaries.

The financial sector development has shown important features of reforming and restructuring the East European economies towards *the rebirth of the capitalism*. On one hand, it clearly has involved the recognition of private property rights and the full range of functioning of the money, especially the possibilities of channeling the savings to investments by profit oriented financial intermediaries. On the other, the options of creation of the financial intermediaries and reforming the monetary and financial system have given rise to different models of transforming the domestic economy and its institutions and institutional order. A common trend in the financial development has been the reconsideration of the currency and exchange rate regimes as well capital controls in favor of greater openness of the transitional economies.

Main Trends in the Financial Deepening of the Transitional Economies

The different approaches and modes of achieving the financial system's reform have had different consequences for the overall macroeconomic and financial stabilization and structural reform. The financial sector reforms in most of the transition countries have been undertaken in order to overcome the inefficiencies associated with heavy

intervention and state control on the financial system and to adopt market oriented policies. By improving and modernization of the banking services important changes in the payments and settlements system have been introduced and the functioning of two-tier banking system has made possible the conduct of the monetary policy of the Central bank.

The efforts to reform the financial system represent a substantial part of the general reconsideration of *the government's role in the economy* and of the socio-economic transformation as a whole. The proceeding simultaneity of the financial sector and real sector transformation in the transition economies complicates attempts to evaluate their relevant contribution for the development of each country respectively. *Significant differences* between the economies and their respective banking *as regards their start up conditions of transition* do not alter this general conclusion.

As a whole, the higher degree of successful transformation of the former centrally planned economies of the Central European countries is indispensably connected with the more efficient development of their financial sector. The transition countries developing as better performers in the overall economic transformation have experienced higher efficiency of the development of their financial sector. Neither of the 'good' performers has allowed for a higher cost of the banking reform by running into a banking crisis in the present decade. On the contrary, the countries lagging behind in their overall economic performance in general have undergone banking disturbances and crises.

Both the financial deepening and the less costly transformation of the banking system in the Czech Republic, Poland and Hungary may be considered indicative of the mode of the capitalist development embarked. The more *consistent policies of financial market development have made possible for their transitional economies to adapt to the new environments more quickly and successfully than others without experiencing a prolonged transitional collapse typical for other countries.*

Two aspects of the financial development may be considered as a sound ground for the better performance of some transitional economies compared to others:

- Higher efficiency of the democratic decisions' processes and of the enforcement of the law as part of the socio-economic and political framework of the transformation of the economic system;
- The dirigist approach to the capitalist transformation by applying more strict requirements and surveillance of the banking and financial sector reform;

The transition countries experiencing unsuccessful macroeconomic stabilisation and political instability have been bound to delay the financial deepening and the financial intermediation development. In countries like Albania, Bulgaria, FYR Macedonia the political confrontation has caused the inconsistency of the implementation of the market oriented reforms. The lack of proper legislation or its unadequate enforcement made possible the high social cost of the financial pyramids and of the banking crises.

In *the case of Russia* vested interests created under the so called controlled market conditions have been bound to oppose reform. Financial regulation has involved protecting the commercial banks (from which the government has expropriated significant seniorage) and discouraging direct markets. Thus due to non-competitive market situation

and the fragmented market conditions the financial market instability has been enhanced by the worsening of the overall economic performance. The “controlled” type of financial sector reform in Russia has entered a profound financial crisis thus showing a significant “gap” in the structure of its financial system. In fact these “gaps” in the financial system at the existence of capital flight and worsening economic performance can have a large impact on the robustness of the financial system as well as the whole economy.

The types of financial sector reforms undertaken in the transition countries subsume a diversity of phenomena. The common problem for all transitional economies is that the restructuring, rehabilitation and the privatization of the banks have to overcome serious threats of systemic instability. By the end of the present decade perhaps there is even more diversity now than there was at the outset of the transition. Thus there is a need to evaluate the degree of financial liberalization as an indicator of the implementation of a given model of capitalism in the transitional economies.

In the typical economic development process David Cole, Hal Scott and Phillip Wellons¹ identify four stages :

- 1) The controlled system;
- 2) Initial liberalization;
- 3) Retrenchment after crisis;
- 4) More aggressive development.

If we apply this approach to discern the stages of financial liberalization the main difference among the “good performers” and the “losers” in the transition so far may be related to *the order of sequencing of liberalization* in each separate country.

The good performers of the Central European countries have passed successfully through the first two stages. Though in different ways Hungary and the Czech Republic have coped with currency weakness and crisis which offer crucial lessons for all transitional countries. The scope of their learning by doing in the financial liberalization made possible to pass through the stage of retrenchment from the crisis without running into high social costs. Hungary avoided a full-blown crisis in 1995 and has continued the financial sector reform. The Czech Republic succumbed to speculative attacks on its currency in May 1997 and was forced to abandon its peg and let its currency float. The rising current account deficit had been widening since 1994 and the main reason for it was that productivity growth had been generally weak, whereas there was excessive real exchange rate appreciation and the wages were allowed to grow both in real domestic and in dollar terms. One of the most important lesson of the Czech experience is that macroeconomic factors alone are not precise enough as indicators of the underlying financial and economic stability of the economy. Institutional and microeconomic factors must be taken into consideration as well.

Some of the transitional countries, like Bulgaria, Estonia and Lithuania have experienced deep financial disorder and banking crisis either at the start of the transition or as a result

¹ Cole, D., Hal, S.Scott and Philip A.Wellons, (1995), “The Asian Money Markets: An Overview”, in Asian Money markets, ed. By David c.Cole, Hal S. Scott and Philip A. Wellons, N.Y., Oxford University press, 1995, pp.3-38

of bad sequencing the stages of the financial liberalization. The Currency Board regimes introduced may be looked upon as making a “better try“ for financial liberalization by passing once again through the first two stages.

In the case of Russia the present financial crisis may be considered as the end of the initial liberalization. The financial crisis has taken various forms and inevitably it will take time for any government to establish a new track of sound finance having in mind the banking crisis, the distorted markets, the capital flight, the exchange rate and balance of payments crisis. A set of austerity measures will be needed to reconcile any government’s commitment to carry out a stabilization program with the society’s expectations to introduce profound changes in the socio-economic policies. Thus the controlled by the political elite financial reform has led to a crisis not only of the financial intermediation but of the real economy as well.

The transitional countries have not embarked upon the stage of “more aggressive” development. The Central European countries are adjusting to more vigorous competition. Prudential supervision and regulation can play a vital role in maintaining stable rather than unstable competitive conditions. The need to enhance competition at the domestic financial markets will make necessary providing better access for the domestic investors and broadening the investors’ base. In order to open the domestic financial markets to foreign investors they must meet international standards with respect to the market microstructure, trading practices, registry, transfer and settlement systems, etc. as well as to have established a track record.

Financial reforms have caused both benefits and costs in the transition to market-oriented economy. The wider choice of savings - investment possibilities have become an advantage of the reforming financial intermediaries allowing for lower transaction costs as well. However, the expectations that through the financial sector development a more market-oriented allocation of capital to its productive uses will take place haven’t been automatically fulfilled. In the course of financial reform the bank behavior has been susceptible to significant changes, as the banks have grown out of the former state control and intervention. Two opposite reactions of the banking sector during the transition have raised once again the problem of the stages of the financial regulation and of the prudential regulation.

On one hand, the banks in some cases embarked upon a reckless expansion of lending even not sticking to the principles of prudential banking, especially in transition countries with inadequate legislation and its enforcement as well as in the case of controlled “markets” by vested group interests.

On the other, following financial reform, for instance upon implementation of the Currency Board regimes, the banks have retrenched from all but lowest-risk lending thus worsening the possibilities for the revival of the domestic economy.

In spite of the diversity of experiences of the transitional economies in the financial reform there is a common awareness that the gradual financial liberalization is to be preferred. The transitional economies that are better performers in Central Europe present convincingly the case of the gradual financial liberalization. As regards the analytical approach economists like Cho and Khatkhate, McKinnon , Villanueva and Mirakhor all underline the need to resort to financial reform and liberalization only upon

achievement of macroeconomic stability and adequate bank supervision as preconditions for the successful financial reform.² The lessons drawn from the experiences of developing countries seem to be confirmed to a great extent in the experiences of the transitional countries in the present decade.

As regards the transitional economies that have undergone financial repression without achieving macroeconomic stabilization and by mid90s had to have a 'second round' of stabilization programs, there exists a controversy as regards the choice between the rapid and gradual financial liberalization.

The financial repression has been applied as a combination of heavy taxation, interest controls, government - intervention in the credit allocation and politicization of the money supply. It has not allowed for a better channeling of savings to investments but instead it has depleted savings in the domestic economy and worsened the moral hazard and asymmetric information problems in the allocation of credits. The non-performing loans and the high indebtedness in the economy became a vicious circle causing banking crises and economic decline. Both a decrease in the depth of the financial system (the so-called shallow finance) as well as loss of efficiency with which savings have been intermediated have been observed.

In such cases the countries under consideration have started a process of reexamination and revision of the role of the financial reform in the overall economic development. The alternative monetary regimes of the Currency Board have been accepted in Eastern Europe as a way to introduce financial discipline, prudential banking and market-based rules of the functioning of the domestic economy. The Currency Board regime denies the government any possibility of using credits from the central bank in financing its budget deficit and thereby forces it to raise financing from the capital markets.

Thus we may consider the present state of financial sector reform in the transitional countries as crucial for the better timing of further liberalization.

In any case only macroeconomic stability and creating better institutional and regulatory order and structures may permit a better mode of shaping the resiliency of the financial system in good times and bad.

The Reforms of the Banking System

The transitional economies have encountered a great deal of difficulties in the restructuring and creation of market-oriented commercial banking. The prevailing influence on the reshaping of banks has been related to the current European Union countries' practices, the prudential banking practices of the USA, as well as experiences in the restructuring of the banks in the Latin American and Asian countries.

² Cho, Y. and Deena Khatkhate, (1989), Lessons of financial liberalization in Asia: A comparative study, WBDP, N 50
McKinnon, R., (1988), Financial Liberalization and Economic Development: A reassessment of interest rate policies in Asia and Latin America. Occasional Paper No. 6, International center for Economic Growth
Villanueva, D., and Abbas Mirakhor, (1990), Interest rate policies, stabilization and bank supervision in developing countries: Strategies for financial reform, IMF Working Paper WP/90/8

On the whole, the process of 'learning by doing' has been the main driving force of the restructuring and modernization of the banking systems. Yet the inefficiencies of the conceptualization of the bank model developing in the transitional countries is a specific feature of the search of contemporary model of capitalism for the transitional countries. Proper conceptualization might be understood as designing a bank regulation and prudential practices more adequate to the transitional countries' needs and problems. In general neither the Basel recommendations for prudential banking nor the EEC directives have been meant to serve as a model to be copied. In the process of realignment of the banking practices of Eastern Europe to the Western standards the transitional economies have still to undergo significant adjustment changes. This makes necessary their own adequate choice of the sequenced measures of banking development and financial deepening of their economy.

Several main obstacles to the proper modernization of the banking systems in the transitional countries persist to exist and evolve in various forms at the different stages of transformation. In broad sense in may distinguish two aspects:

First, *the restructuring and regulation of the banking system.*

Within the scope of this group of problems may be considered: 1) the extent of the accomplished rehabilitation of banking systems; 2) the introduction of central bank independence in the conduct of the monetary and exchange rate policies and the eventual outcome of the politicized central banking; 3) introduction of western prudential and regulation standards; 4) liberal licensing and low entry requirements; 5) risks of quick adjustment of the asset prices due to the risks involved with the indebtedness of the enterprises of the real sector. The combined results are rather controversial so far.

Second, *the problem for the ownership and the control over the banks.*

The restructuring of the former socialist banking systems is centered on the problem of bank-government relationship. The transitional economies have to balance the usage of two policy instruments: the ownership and the regulations of the banks. Privatization issues combine both the aspects but they involve higher complexity of the restructuring. This is the reason for the more gradual process of bank privatization in some cases like Poland or for the eventual delay in the accomplishment of large scale programs of privatization (as is the case of Bulgaria). The better sequencing of the implementation of the two policy instruments is instrumental for the success of the bank-enterprise restructuring in the transitional economies.

So far the better performers among the transitional economies have succeeded to pay adequate attention predominantly to the regulations of the banks and hereafter to the ownership restructuring.

The government policies adequately addressing the problems of control-ownership of the banks are important ingredients of the transition to a modern type of capitalist development. The more dirigist approach of the governments in the regulation of the restructuring of the banks in the neoliberal doctrine of economic policy has given visible results in the rehabilitation process. On one hand, the restructuring of the liabilities' side of the banks has involved in most of the cases:

1) recapitalization with private and non-private equity (including international financial institutions); 2) raising of the own capital of the banks through attracting new shareholders or by consolidation procedures for existing banks.

On the other hand, **the restructuring of the bank assets side** has presented greater possibilities and more challenges for the contribution of the financial sector reforms to the introduction of modern capitalism in some of the transitional countries. Important contribution to the introduction of capitalism has played the application of the practices and methods of: 1) bank loan hospital techniques and agencies; 2) debt-for-debt exchange; 3) equity-for-debt swaps; 3) loan swaps; 4) government bond-for-bank loans swaps; 5) debt swaps as privatization methods. In all forms of bank restructuring an important role have played the government intervention and consistent government policies (though in some of the countries there hasn't been any such consistency of the policies pursued and failures to restructure have had greater social cost).

The allocation of credit through the banking system has not been adequately reformed to fulfill market based criteria and the dependence on the government intervention in the transitional economies has remained high. Credit rationing, credit crunch, government guarantee schemes, non-performing loans of the public sector and government instruments for rescheduling and restructuring of the public enterprises bank debts' remain still widely applied practices of the posttotalitarian forms of government involvement in the banking system.

On the other hand, in all transitional countries where too liberal practices of licensing regime and low entry requirements have been applied the banking bankruptcies and crises have become inevitable. In the context of the neoliberal doctrine of the economic policy of some transitional countries the banking and the financial capital creation have undergone higher risks of failures. Major aspects of banking activities have remained outside overall supervision and surveillance thus causing problems for their credibility of the financial and the economic system as well .

The most recent evolution of the financial crisis in Russia raises the case of the conflict between the "controlled" by the elite financial intermediation and the deeply segmented domestic economy where the economic and financial liberalization has not proceeded alongside market based criteria thus deepening the economic crisis. The failure to restructure the financial system and the overall adjustment of the Russian economy thus may cause threats for the political and social stability.

As regards some small East European countries in the process of macroeconomic stabilization the high nominal interest rates and other financial repression policies have had some unfavorable effects on the financial deepening of their economies due to : 1) the lack of proper market structures and still persisting politicization of the monetary policy; 2) the monopolistic lending behavior by individual banks; 3) the persistent practices of non-performing loans leading to bank bankruptcies and crises.

The bank restructuring process has engaged to a different extent *the direct government intervention*. Some countries like the Czech Republic have established government Agency for the management of the bad debts of the enterprises and for the rehabilitation of the distressed banks. In other (less successful in their transition) countries the policies of bank rehabilitation have been inconsistent and have been left much more to the private

initiative, the growth of private economic groups and the inconsistency and fluidity of the political process.

Thus the banking systems in the transitional economies have undergone restructuring to a different extent but *the structural defects still remain*. There are pending problems in the proceeding restructuring of the banking systems in most of the transitional countries related to the real sector and its low efficiency.

The ongoing financial crisis in Russia and its disturbing effects on all emerging markets raises problems for the prospects of the division of roles between the banks and the direct capital markets as sources for the external financing of the enterprises. As consequences of this crisis the bank lending may increase its importance for the business credits in Eastern Europe. Thus prudential banking criteria have to be observed more adequately as the moral hazard problem and the asymmetrical information gain higher significance in periods of financial crisis.

The conclusion may be that the most important hallmark of the East European banking systems remains the close interrelation between the bank and the enterprises of the real sector. The revival and economic growth of the transitional economies is a precondition for the rehabilitation and growth of their banking sector.

Although government's participation in the process of the financial deepening of the transitional economy has been unavoidable and necessary there have been unfavourable trends and disadvantages of its involvement in the marketization. There is a trend of increasing the control over the banking systems, the transfer of risk of the banks' losses to the government has continued to create fiscal problems for the state budget deficit and the government debt management in most of the countries concerned. In general there has been a delay in the prospects of privately governed and operated banking system, additional government subventions for some of the state banks that have been considered "too big to fail" and last but not least the continuation of the liquidity dependence of banks on state budget activities or on providing services for the Government debt management.

The prospects for the banking systems in the transitional economies are to be shaped to mirror the Western benchmark. Yet the controversial problems of the ongoing development of corporate structures and competitive performance will have substantial impact on the development of the banking systems. The main models of the universal banking system that have been embarked upon in the transitional economies (true universal banking model through the initiation of the EU directives, the American model through growing advisory potential based upon the narrow banking and the core banking) may prove to set the road for *the process of eventual convergence* of the East European banking practices to the Western ones in medium term prospect.

There are three possible ways of the development of the convergence process: 1) through the transitional restructuring and rehabilitation; 2) through the regulation and the regulatory framework of interrelations between the banks, the private and public sector and the Government policies; 3) the regulation of competitive capital markets.

Conclusion

The transitional economies present a typical case of segmented financial markets (See Table 1). The segmentation approach to the growth of banking and non-banking financial intermediaries is deeply rooted in the specifics of the capital structure formation, the inadequate regulatory environment and the concerns about corruption and political risks involved in the emerging markets. The cases of illiquidity of some of the underlying financial markets present the conflicts of economic interests which remain a crucial bottleneck to the economic development. Policy options are not exhausted for the rehabilitation of the financial sector and for creating well functioning financial relations. New networks of financial interrelations may emerge between government, enterprises, household and banks and financial firms. The institutional functions of the future financial sector's building as essential for the market economy will have to undergo important changes in order to meet the transitional challenges.

How Are Banks Doing In A Transition Economy: An Estonian Case¹

August Aarma and Vello Vensel

1. Introduction

The problem of banking and financial system soundness has become more important in all countries during the last years. In the transition countries, the weakness of banking system is the major factor of delaying expected economic growth. Stanley Fisher, for example, pointed out some more important tensions and trade-offs need to be recognized: (1) the benefits of strengthened supervision need to be weighted against the costs; (2) there is the related issue of incentive compatibility, with the moral hazard problem as a key aspect (see Fisher, 1997). It is important to study the earlier history of financial development in other countries (see Caprio and Vittas, 1997; Benston and Kaufman, 1997 etc.).

All three Baltic States have also experienced serious banking crises that surfaced in Estonia in 1992, in Latvia in early 1995, and in Lithuania in late 1995. It is emphasized that there were four interrelated systematic factors underlying the banking crises in Baltics: (1) poor the central bank regulation and supervision; (2) poor accounting and excessive taxation; (3) an inadequate legal infrastructure for lending; (4) pervasive corruption coupled with weak banking skills and mismanagement (see Fleming, Chu and Bakker, 1997). All economic agents (banks, their customers, bank supervisors) were simply unable to monitor and control the market risks inherent in the completely new economic environment.

There exist a lot of lessons from earlier financial crises in various countries and recent crises in Asia. Kaminsky and Reinhart mentioned: "The cycle of overlending is exacerbated by implicit or explicit deposit guarantees, poor supervision, and moral-hazard problems in the banking sector. Crises are accompanied by an overvaluation of the currency, weakening exports, and the bursting of asset price bubbles" (Kaminsky and Reinhart, 1998, p. 444). Seems, that this has been written for characterizing the nowadays Estonian situation! It is noted that the most negative factor is that domestic credit expansion has been extremely rapid during the last years, which was funded by massive

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borrowing from abroad due to the sizable interest rate differential (see, for example, Krzak, 1998). Doubt about the soundness of the banking sector is also among the greatest threats to the credibility of a currency board arrangement in Estonia, see also Enoch and Gulde, 1997.

Nowadays banking crises can be classified mostly as “growth crises”, to which are characteristic economic deregulation and liberalization, the removal of cross-border restrictions on capital flows, and increased competition in the financial sector. It must be mentioned that to solve financial crises is very costly for the country’s economy. Here we can find considerable examples from solving the Nordic banking crises: in Norway, funds used in rescue operations during 1991-1992 were about 19.2 billion NOK (2.6% of GDP); in Sweden, total commitments (including guarantees) were about 85 billion SEK (5.9% of GDP); in Finland, total amount of public bank support was about 56.6 billion FIM (10% of GDP), etc. (see Drees and Pazarbasioglu, 1998).

We can only imagine which would be such rescue costs in the case of serious financial crises in weak transitional countries! There is a numerous literature about the lessons of earlier banking crises and restructuring the banking systems (see Alexander et al., 1997; Calomiris and Mason, 1997; Dziobek and Pazarbasioglu, 1997; World Bank, 1998, etc.).

The central bank (Bank of Estonia) instituted a licensing review and strengthened supervision in 1994-1995, also in 1997-1998. A new Law on Credit Institutions was passed in the end of 1994, increasing the central bank’s supervision and enforcement capabilities. All banks were required to develop internal auditing departments and to be audited annually by external auditors, all banks were also required to use IAS for their financial statements. New prudential requirements (minimum share capital and equity requirements; capital adequacy, liquidity, reserve, and maximum risk requirements etc.) are strictly controlled by the central bank.

Traditional financial ratio analysis is mainly used for bank performance analysis. We may find from various textbooks on banking and financial institutions different versions of this approach (see for example Mishkin, 1995, Ch. 11; Johnson, 1993, Ch. 13; Gardner and Mills, 1991, Part 3; Hempel and Simonson, 1994, Part 3, etc.). There are also a number of papers about using financial ratio analysis in combination with more complicated analysis techniques (Zimmerman, 1996, English and Read, 1995, Calcagnini and Hester, 1995). Different versions of DuPont financial ratio analysis (see Cole, 1973) seem to be more perspective for banks and other financial institutions performance analysis (see for example Dietrich, 1996).

Recent researches on banking efficiency have devoted more attention to the problems of so-called X-inefficiency which refers to the deviations from the production-efficient frontier which depicts the maximum attainable output for a given level of input. Empirical studies have shown that substantial X-efficiencies seem to be exist in banking system (see Berger, Hunter, and Timme, 1993; Kwan and Eisenbeis, 1996; European Commission, 1997). It is shown, for example, that managers of inefficient banks, who are more likely to be entrenched, may be inclined to take on more risk (see Gordon and Rosen, 1995).

The focus of financial analysis for the management of any bank should be the efficiency of the performance of the bank measured from the viewpoint of investors/owners income maximization. Various measures of rates of return are used mainly for that. Now we present one of the possible approaches for such financial analysis using the modified

version of DuPont analysis (see Cole, 1973) which is similar to Dietrich's (see Dietrich, 1996) approach and which is presented also in (Vensel, 1997; Aarma and Vensel, 1998).

2. Development of the Estonian Banking System: Historical Notes

First commercial bank (named Tartu Commercial Bank) in the territory of former Soviet Union was established in Estonia during 1988. This bank went into bankruptcy and was liquidated during 1992-1993. So as there was a great demand for banking services by emerging private sector, maximum number of commercial banks operating simultaneously in the small Estonian banking market, was in 1992 – 42 banks. Some of these were liquidated during the first bigger banking crises, during 1992-1993, and some of them were merged into more larger commercial banks. Short history of the Estonian contemporary banking system is presented in Table 1.

In 1997, the development of Estonia's banking sector can be described by a rapid nominal growth of total assets and loan portfolios. 1997 was also a beginning of a new stage in the development of Estonia's financial sector, especially in the international context which is confirmed by investment grade credit ratings assigned to Estonia: standard and Poor's BBB+ and Moody's Investors Service's Baa1. The rapidly growing economy (GDP growth rate about 12%) boosted credit demand and also non-banking financial intermediation accelerated. However, implementation of the intended Estonian bank's expansion to the other Baltic countries and Russia was only partially realized due to the tightened market situation both in Estonia and internationally.

Table 1. History of Estonian Banking Sector (Only Operating Banks, Summer 1998)

No.	Bank	Established	Organizational Changes
A. Large Banks			
1.	Hansapank	01.07.1991	Mergering with the Estonia Savings Bank in 1998
2.	Estonian Savings Bank	14.04.1992	Established on the basis of former state owned savings offices, merged with Estonian Industrial bank in 1996, merged with Hansapank in 1998
3.	Union Bank of Estonia	15.12.1992	Established on the basis of 11 smaller regional banks, merged with North-Estonia Bank in 1997, mergering with the Bank of Tallinn in 1998
B. Medium-Size Banks			
4.	Bank of Tallinn	21.12.1992	Mergering with the Union Bank of Estonia in 1998
5.	Estonian Forexbank	30.06.1992	Mergered with Raepank in 1995
6.	Land Bank of Estonia	22.10.1991	Mergered with 3 smaller banks in 1996, bankruptcy procedure in process
7.	Estonian Investment Bank	30.06.1992	
C. Small Banks			
8.	Estonian Credit Bank	10.04.1992	
9.	ERA Bank	07.10.1991	
10.	EVEA Bank	26.07.1989	
11.	Tallinn Business Bank	09.12.1991	
12.	Merita Bank Ltd, branch	20.06.1995	Established on the basis of mergering KOP and SYP (Finnish banks) offices

The consolidation continued in the banking sector, so that there were operating 12 commercial banks in Estonian market by the end of 1997 and by the beginning of Summer 1998 (included one foreign bank branch, Merita Bank) against 15 in 1996, from which 10 were members of Estonian Banking Association. There were also operating 5 foreign banks' representative offices: OKOBANK (Finnish), Postipankki OY (Finnish), Svenska Handelsbanken (Swedish), Landesbank Schleswig-Holstein Girocentrale (German), Bazis Bank Ltd (Russian). We may conclude that Estonian banking market is already quite concentrated: market share of 3 bigger banks was about 70% (in total assets), HHI by total assets 1775. The consolidation of the banking sector continued in 1998 and now there are operating 10 banks.

3. Non-Resident Liabilities and the Ownership Structure

The dependence of Estonian banking sector development on the development of international financial markets and on foreign investments deepened significantly during the last year. By the data of the central bank (see Eesti Pank, 1998, p. 44), non-resident liabilities, being the main source of growth of the total assets, more than trebled over the year 1997, increasing their share in external funds from 19% to 36%. The most significant shift in the liabilities structure was the increase of debt securities owned by non-residents by eight times. It must be mentioned that the end of the year 1997 crises in international financial markets did not have an immediate impact on the volume of the foreign capital inflow.

Table 2. Ownership Structure of Estonian Banks, as of 1 October 1997 (%)

Bank	Estonian owners			Non-resident owners		
	Institutions	Individuals	Total	Institutions	Individuals	Total
Estonian Forexbank	66.0	13.0	79.0	20.0	1.0	21.0
Estonian Savings Bank	35.1	10.2	45.3	54.3	0.4	54.7
Estonian Investment Bank	33.3	0.1	33.4	66.6	-	66.6
Estonian Credit Bank	6.1	67.8	73.9	26.1	0.0	26.1
Land Bank of Estonia	52.1	10.9	63.0	36.9	0.1	37.0
Union Bank of Estonia	54.5	11.2	65.7	33.6	0.7	34.3
ERA Pank	61.7	14.1	75.8	24.2	-	24.2
EVEA Pank	30.5	25.8	56.3	40.0	3.7	43.7
Hansapank	45.0	7.7	52.7	46.6	0.7	47.3
Bank of Tallinn	64.7	12.9	77.6	22.0	0.4	22.4
Tallinn Business Bank Ltd	42.6	0.1	42.7	57.3	-	57.3
Total	45.8	11.3	57.1	42.3	0.6	42.9

Source: Eesti Pank, Annual Report 1997, p. 45

The capitalization of Estonian banks improved significantly during the last year, the average capital adequacy ratio increased from 11.6% at the end of 1996 to 14.6% at the end of 1997. The share of non-residents (included off-shore regions) in the share capital of Estonian banks increased significantly – from 30% in late 1996 to 43% in Autumn 1997 (see Table 2), verifying so the continuous internationalization of the Estonian banking sector. The ownership structure of Estonian banks as of 1 October 1997 is also presented in Table 2. The share of public sector among Estonian institutional investors was 4.2% (in Estonia Investment Bank, 33.3%), the share of credit institutions 6.3% (in Estonian

Forexbank, 27.3%), the share of investment funds 5.7% (in Land Bank of Estonia, 30.2%), and the share of other legal persons 29.7% (in ERA Bank, 61.7%). The share of credit institutions among non-resident investors was 22.7% (in Estonian Savings Bank, 43.6%), the share of investment funds 5.1% (in Estonian Investment Bank, 33.3%), and the share of other legal persons 14.0% (in EVEA Bank, 39.5%).

4. DuPont Financial Ratio Analysis : Methodology

The starting point of the bank performance analysis is to calculate book rate of return on equity, ROE

$$ROE = \frac{\text{Earnings After Taxes, } EAT}{\text{Book Value of Equity, } BVE} \quad (1)$$

which consists of three components:

(1) pullthrough, U

$$U = \frac{\text{Earnings After Taxes, } EAT}{\text{Earnings Before Taxes, } EBT} \quad (2)$$

(2) financial leverage, LEV

$$LEV = \frac{\text{Total Assets, } TA}{\text{Book Value of Equity, } BVE} \quad (3)$$

(3) return on total assets, ROA

$$ROA = \frac{\text{Earnings Before Taxes, } EBT}{\text{Total Assets, } TA} \quad (4)$$

so that these financial ratios form the multiple factor system

$$ROE = \frac{EAT}{EBT} \times \frac{TA}{BVE} \times \frac{EBT}{TA} = \frac{EAT}{BVE} \quad (5)$$

All these financial ratios are widely used for banks performance analysis. Pullthrough (U) shows success of the bank tax management policy as it may be interpreted as one minus the average corporate tax rate. The financial leverage ratio (LEV) measures how many croons of assets the bank has per croon of equity and may be interpreted as a bank's "gearing". Return on total assets (ROA) is one of the most frequently used financial ratio by financial analysts. ROA measures the ability of bank management to generate income after all financial and non-financial costs and expenses for owners.

Changes in ROA are usually the cause of the most important changes in banks' performance and it needs more detailed analysis. The other financial ratios as components of ROE, pullthrough (U) and financial leverage (LEV), reflect tax treatment and capitalization rate, and they usually change less. ROA may be divided into the following components:

(1) bank burden, B

$$B = \frac{\text{Net Non - Interest Revenue, } NNIR}{\text{Total Assets, } TA} = \frac{NIR - NIE}{TA} \quad (6)$$

where NIR - non-interest revenue; NIE - non-interest expense;

(2) earning assets ratio, EAR

$$EAR = \frac{\text{Earning Assets, } EA}{\text{Total Assets, } TA} \quad (7)$$

(3) net interest margin, NIM

$$NIM = \frac{\text{Net Interest Revenue, } NIR}{\text{Earning Assets, } EA} = \frac{IR - IE}{EA} \quad (8)$$

where IR - interest revenue; IE - interest expense,

which form factor system

$$ROA = \frac{NNIR}{TA} + \frac{EA}{TA} \times \frac{NIR}{EA} = \frac{NNIR + NIR}{TA} = \frac{EBT}{TA} \quad (9)$$

Burden (B) measures bank management's control of operating expenses. Burden for banks is negative to show the fact that non-interest revenue (fees, earned commissions, other operating income) does not cover labor and other administrative or non-interest expenses. Earning assets ratio (EAR) is usually not an important factor of changes in ROA but it may be interesting to make comparisons between various banks because EAR characterizes different development strategies. Net interest margin (NIM) is more important and widely used financial ratio in the factor system (9). NIM reflects the interest spread between assets and liabilities, it focuses on the net earnings from investing through borrowed funds and is the major source of the profitability of the bank.

For more detailed analysis, NIM may be divided into three following components:

(1) return on earning assets, REA

$$REA = \frac{\text{Interest Revenue, } IR}{\text{Earning Assets, } EA}$$

(10)

(2) cost of liabilities, COL

$$COL = \frac{\text{Interest Expense, } IE}{\text{Liabilities, } L} \quad (11)$$

(3) liabilities to earning assets ratio, LEA

$$LEA = \frac{\text{Liabilities, } L}{\text{Earning Assets, } EA} \quad (12)$$

which form the factor system

$$NIM = \frac{IR}{EA} - \frac{IE}{L} \times \frac{L}{EA} = \frac{IR - IE}{EA} = \frac{NIR}{EA} \quad (13)$$

Return on earning assets (REA) connects directly earning assets and interest revenue generated by them. Thus REA characterizes average rate of lent funds and earned dividends. Cost of liabilities (COL) may be interpreted as average price of borrowed capital. Liabilities to earning assets ratio (LEA) measures the intensity of bank investment activity.

5. Methodology of the Matrix Approach

It is possible to use the matrix model to present and analyze interrelations between various economic and financial indicators. On the basis of n quantitative indicators Y_i ($i = 1, 2, \dots, n$; n - the number on initial quantitative indicators) it is possible to define $n(n - 1)$ qualitative indicators, for example financial ratios

$$x_{ij} = \frac{Y_i}{Y_j} \quad (i, j = 1, 2, \dots, n; i \neq j) \quad (14)$$

which form $(n \times n)$ square matrix

$$\mathbf{X} = \begin{matrix} & \begin{matrix} x_{11} & x_{12} & x_{1n} \end{matrix} \\ \begin{matrix} x_{21} \\ x_{n1} \end{matrix} & \begin{matrix} x_{22} & x_{2n} \\ x_{n2} & x_{nn} \end{matrix} \end{matrix} = \left\{ x_{ij} \right\} \quad (15)$$

and which we call the matrix model of the studied phenomenon.

We may draw two important conclusions from these features of the matrix model (15):

(1) as the symmetric square matrix (15) consists of two triangular matrices which are as “mirror reflection” of each other (these contain elements which are reciprocals of each other), the financial (or other economic) information needed for analysis is presented only in one triangular matrix;

(2) as square matrix (15) consists of row and column vectors in linear dependence, it is enough to take into observation only one vector for giving a generalized estimate to the studied phenomenon.

In the case of the component or decomposition analysis of banks performance, the first of these conclusions is important and we take into observation only one triangular matrix focusing on the study and analysis of interrelations between the elements/financial ratios of the matrix model. Further steps of analysis depend on, how many and what initial quantitative indicators from the balance sheet and the income statement of the bank to choose for the formation of the matrix model, and which sequence to follow when including initial indicators into the model. If we follow in the choosing and sequencing the initial indicators the principle to start with the output or result indicators by their degree of “finality”, and to end with the input or resource indicators by their “preliminarity”, we receive the matrix model which consists of two triangular matrices:

- (1) matrix of effectiveness, which elements/financial ratios reflect various aspects of the efficiency of the bank performance;
- (2) inverse matrix of effectiveness, which consists of the reciprocals of the efficiency indicators/financial ratios.

Financial analysis of any bank starts with obtaining the financial data. If to follow principles discussed here, we get the following sequence of the most important initial quantitative financial indicators:

- (1) Y1 - earnings after taxes, EAT; (2)Y2 - earnings before taxes, EBT; (3)Y3 - net interest revenue, NIR; (4)Y4 - interest revenue, IR; (5)Y5 - total operating income, TOI; (6)Y6 - earning assets, EA; (7)Y7 - book value of equity, BE; (8)Y8 - total assets, TA.

Table 3. The Matrix Model for Banks Performance Analysis

	Earnings After Taxes, Y1, EAT	Earnings Before Taxes, Y2, EBT	Net Interest Revenue, Y3, NIR	Interest Revenue, Y4, IR	Total Operating Income, Y5, TOI	Earning Assets, Y6, EA	Book Value of Equity, Y7
Earnings Before Taxes, Y2, EBT	$x21=Y1/Y2$ Net Earnings to Earnings Ratio, NEER*						
Net Interest Revenue, Y3, NIR	$X31=Y1/Y3$ Net Earnings to Net Interest Ratio, NENIR	$x32=Y2/Y3$ Earnings to Net Interest Ratio, ENIR					
Interest Revenue, Y4, IR	$x41=Y1/Y4$ Net Earnings to Interest Ratio, NEIR	$x42=Y2/Y4$ Earnings to Interest Ratio, EIR	$x43=Y3/Y4$ Net Interest to Interest Ratio, NIIR				
Total Operating Income, Y5 TOI	$x51=Y1/Y5$ Net Earnings to Total Income Ratio, NETIR (Profit Margin)*	$x52=Y2/Y5$ Earnings to Total Income Ratio, ETIR	$x53=Y3/Y5$ Net Interest to Total Income Ratio, NITIR	$x54=Y4/Y5$ Interest to Total Income Ratio, ITIR			
Earning Assets, Y6, EA	$x61=Y1/Y6$ Net Return on Earning Assets, NREA	$x62=Y2/Y6$ Return on Earning Assets, REA	$x63=Y3/Y6$ Net Interest on Earning Assets, NIEA (Net Interest Margin)*	$x64=Y4/Y6$ Interest on Earning Assets, IEA (Return on Earning Assets)*	$x65=Y5/Y6$ Total Income on Earning Assets, TIEA		
Book Value of Equity, Y7, BE	$x71=Y1/Y7$ Net Return on Equity, NROE*	$x72=Y2/Y7$ Return on Equity, ROE*	$x73=Y3/Y7$ Net Interest on Equity, NIOE	$x74=Y4/Y7$ Interest on Equity, IOE	$x75=Y5/Y7$ Total Income on Equity, TIOE	$x76=Y6/Y7$ Earning Assets to Equity Ratio, EAER	
Total Assets, Y8, TA	$x81=Y1/Y8$ Net Return on Assets, NREA*	$x82=Y2/Y8$ Return on Assets, ROA *	$x83=Y3/Y8$ Net Interest on Assets, NIOA	$x84=Y4/Y8$ Interest on Assets, IOA	$x85=Y5/Y8$ Total Income on Assets, TIOA*	$x86=Y6/Y8$ Earning Assets Ratio, EAR*	$X87=Y7/Y8$ Equity Multiplier, EM= /LEV*

The matrix model for bank performance analysis is presented in Table 3. We must say some words about the used terminology. The fact is that different authors use different definitions and terms of financial ratios used for banks (or firms) performance analysis. Some of the most frequently used and well-known ratios are exceptions, as for example return on assets (ROA), return on equity (ROE), net interest margin (NIM). But even ROA and ROE may be calculated using net income/earnings after taxes (EAT) or earnings before taxes (EAT). For organizing the terminology, we used the following terminological principles:

- (1) all qualitative indicators/financial ratios which reflect proportions among the output quantitative indicators are defined as (net) earnings or (net) interest ratios to corresponding another quantitative input indicator, for example, net interest to interest ratio, NIIR

$$NIIR = \frac{\text{Net Interest Revenue, } NIR}{\text{Interest Revenue, } IR} \quad (16)$$

- (2) all qualitative indicators/financial ratios which reflect proportions between output and input quantitative indicators, and are traditional indicators of the efficiency, are defined as (net) return, (net) interest or total income to corresponding input quantitative indicator, for example, interest on earning assets, IEA

$$IEA = \frac{\text{Interest Revenue, } IR}{\text{Earning Assets, } EA} \quad (17)$$

- (3) qualitative indicators/financial ratios reflecting proportions among input quantitative indicators are defined more traditionally, as for example equity multiplier (EM) and earning assets ratios.

More widely used financial ratios in Table 3 are marked with asterisk (*) and some of traditionally used terms are also presented in parentheses, for example,

$$x_{51} = \frac{\text{Earnings After Taxes, } EAT}{\text{Total Operating Income, } TOI} = NETIR = PM \quad (18)$$

6. Results of the Financial Ratio Analysis of the Estonian Commercial Banking System

Initial financial information in the form of simplified consolidated financial statements of Estonian commercial banking system as a whole in 1994-1997 is presented in Table 4. Respective growth rates 1997/96 and 1997/94 are also presented.

Results of the usage of earlier discussed modified version of DuPont analysis are presented in Table 5. These results need some comments, focusing on the growth rates of 1997/1994.

1. Book rate of return on equity (ROE), which is the most widely used and popular measure of the bank performance results from the viewpoint of owners/investors, increased during the four years about more than three times (311.8%). Banks earnings available for common to earnings before taxes ratio (pullthrough, U) has risen 9.6%, which characterizes the improvement of Estonian banks tax management policy, or they have been more skillful to find various "tax shelters". Because $(1 - U) = t(t - \text{the average tax rate})$, the average tax rate in Estonian commercial banking system has fallen from 17.82% to 9.92%. Financial leverage ratio (LEV) decreased substantially due to the central bank's new equity requirements, which forced banks to rise equity or to merge. The main factor of the ROE rise was substantial increase of the level of return on total assets (ROTA), that needs further more detailed analysis.

Table 4. Simplified Consolidated Financial Statements of Estonian Banking System (million croons)

Items	1994	1995	1996	1997	1997/96, %	1997/1994, %
A. Income Statement Data						
1. Interest Revenue, IR	878.6	1177.3	1722.9	2661.6	154.5	302.9
2. Interest Expense, IE	291.9	413.9	697.0	1217.5	174.7	417.1
3. Net Interest Revenue, NIR = IR – IE	586.7	763.4	1025.9	1444.1	140.8	246.1
4. Non-Interest Revenue, NOIR	429.1	672.8	1038.2	1692.6	163.0	394.5
5. Non-Interest Expense, NOIE	932.2	1106.6	1500.0	2066.4	137.8	221.7
6. Net Non-Interest Revenue, NNIR = NOIR – NOIE	-503.1	-433.8	-461.8	-373.8	80.9	74.3
7. Earnings Before Taxes, EBT = NIR + NNIR	83.6	329.6	564.1	1070.3	189.7	1280.3
8. Earnings After Taxes, EAT	68.7	288.5	513.9	964.1	187.6	1403.3
Balance Sheet Data (average)						
1. Cash and Reserves, R	1468.0	1425.3	1842.7	3128.9	169.8	213.1
2. Earning Assets, EA	6027.3	9721.3	14683.7	24513.2	166.9	406.7
3. Fixed and Other Assets, FA	745.4	1328.3	1853.0	2686.4	145.0	360.4
4. Total Assets, TA = R + EA + FA = L + BVE	8240.7	12474.9	18379.4	30328.5	165.0	368.0
5. Liabilities, L	7567.5	11433.9	16634.5	27197.0	164.1	360.7
6. Book Value of Equity, BE	673.2	1041.0	1744.9	3031.5	173.7	450.3

Source: The Bank of Estonia Statistical Datasheets.

2. ROTA rise from 1.014% to 3.529% during four years was caused by the decrease of Estonian banks burden (B) due to the improvement of banks' cost control and services pricing, and due to the increase of the share of interest-earning assets in the total assets. But at the same time, net interest margin level (NIM) which reflects the interest rate spread between assets and liabilities for deposit-taking financial institutions and is the major source for the profitability of banks, has decreased substantially, from 9.734% to 5.891 %, i.e. decrease about 40%. This phenomenon also needs further analysis.
3. We may draw some important and interesting conclusions from the component analysis of the substantial decrease of NIM level:
 - (a) both return on earning assets (REA) and cost of liabilities (COL) have fallen substantially during the last years due to the overall falling of interest rates in Estonian banking market;
 - (b) REA has fallen faster than COL, i.e. interest spread decreased during the last years considerably $((14.58\% - 3.857\%) - (10.86\% - 4.460\%)) = 10.723\% - 6.4\% =$

4.323%), this change reflects strengthened competition between banks themselves and with other financial institutions, as for example investment funds;

(c) liabilities to earning assets ratio (LEA) has also fallen substantially during the last years, i.e. Estonian commercial banks intensified their lending and investment activities, and almost all available resources have been invested into the interest-earning assets.

(d)

Table 5. Financial Ratio Analysis of Estonian Commercial Banks (1994-1997)

Financial Ratio	1994	1995	1996	1997	1997/96, %	1997/94, %
<i>Book Rate of Return, % ROE = EAT/BVE</i>	10.20	27.71	29.45	31.80	108.8	311.8
1. Components of ROE, $ROE=U \times LEV \times ROTA$						
(1) Pullthrough, %, $U = EAT/EBT$	82.18	87.53	91.10	90.08	98.9	109.6
(2) Financial Leverage, $LEV = TA/BE$	12.24	11.98	10.53	10.00	95.0	81.7
(2) Return on Total Assets, %, $ROTA = EBT/TA$	1.014	2.642	3.069	3.529	115.0	348.0
2. Components of ROTA, $ROTA = B + EAR \times NIM$						
(1) Burden, %, $B = NNIR/TA$	-6.105	-3.477	-2.513	-1.233	49.1	20.2
(2) Earning Assets Ratio, %, $EAR = EA/TA$	73.14	77.93	79.89	80.83	101.2	110.5
(3) Net Interest Margin, %, $NIM = NIR/EA$	9.734	7.853	6.987	5.891	84.3	60.5
3. Components of NIM, $NIM = REA - COL \times LEA$						
(1) Return on Earning Assets $REA = IR/EA$	14.58	12.11	11.73	10.86	92.6	74.5
(2) Cost of Liabilities, %, $COL = IE/L$	3.857	3.620	4.190	4.460	106.5	115.7
(3) Liabilities to Earning Assets Ratio, $LEA = L/EA$	1.2555	1.1762	1.1329	1.1136	98.3	88.7

Source: Author's calculations.

7. Results of Using the Matrix Model

Initial quantitative financial indicators of Estonian commercial banking system needed for using the matrix model are presented in Table 6. The effectiveness matrix of Estonian commercial banks with all earlier described financial ratios is presented in Table 7. Actually, in Table 7 seven different matrixes are presented together. The key for reading the financial information in Table 7 is as follows:

- (1) definition of corresponding financial ratio;
- (2) - (5) levels of corresponding financial ratio in 1994-1997;
- (6) relative change of the corresponding financial ratio as the growth rate, 1997/96;
- (7) growth rate 1997/94.

Table 6. Initial Financial Indicators Needed for the Matrix Model (thousand croons)

Initial Financial Indicators	1994	1995	1996	1997	1997/96 %	1996/94 %
Y1, Earnings After Taxes, EAT	68.7	288.5	513.9	964.1	187.6	1403.3
Y2, Earnings Before Taxes, EBT	83.6	329.6	564.1	1070.3	189.7	1280.3
Y3, Net Interest Revenue, NIR	586.7	763.4	1025.9	1444.1	140.8	246.1
Y4, Interest Revenue, IR	878.6	1177.3	1722.9	2661.6	154.5	302.9
Y5, Total Operating Income TOI	1307.7	1850.1	2761.1	4354.2	157.7	333.0
Y6, Earning Assets, EA	6027.3	9721.3	14683.7	24513.2	166.9	406.7
Y7, Book Value of Equity, BE	673.2	1041.0	1744.9	3031.5	173.7	450.3
Y8, Total Assets, TA	8240.7	12474.9	18379.4	30328.5	165.0	368.0

Source: Author's calculations.

The most important element/financial ratio of the effectiveness matrix is x_{81} , which forms the following multiple factor system:

$$x_{81} = x_{21} \times x_{32} \times x_{43} \times x_{54} \times x_{65} \times x_{76} \times x_{87} \tag{19}$$

or substituting with the definitions of corresponding financial ratios

$$NROA = U'ENIR'NRITIR'TIEA'EAER'EM = \frac{EAT}{EBT} \frac{EBT}{NIR} \frac{NIR}{IR} \frac{IR}{TOI} \frac{TOI}{EA} \frac{EA}{BVE} \frac{BVE}{TA} = \frac{EAT}{TA} \tag{20}$$

All these elements of the factor system (20) are in more details discussed in (Vensel, 1997; Aarna and Vensel, 1998). Up till now we have demonstrated only one possibility of the usage of the matrix model for banks performance analysis. There is a number of different other possibilities to develop various other factor systems, to determine absolute influence of changing respective financial ratios to the change of different quantitative financial indicators, to compose multifactoral aggregate index-numbers in the case of desegregated initial information, etc.

Initial quantitative financial indicators, needed for the development of banks performance efficiency matrix, may be divided into two groups by these economic substance:

- (1) results or output indicators of the bank activities, which one may take from the income statement: earnings after taxes (EAT), earnings before taxes (EBT), net interest revenue (NIR), interest revenue (IR), total operating income (TOI);
- (2) resource or input indicators of the bank operating, which one may take from the balance sheet: earning assets (EA), book value of equity (BVE), total assets (TA).

We may compare the bank with any other business firm which uses available resources/production factors/inputs (equity and borrowed external funds) for producing something useful. I.e., during the bank operating certain inputs are transformed into certain outputs. The bank operating result is production of specific financial services during the financial intermediation: credit services, securities services, transaction proceeding services, asset management services, information and financial advice offering services. All these financial services in money value are expressed in generated by the bank management revenues and income.

Correspondingly to the participation of initial financial indicators into two groups, the efficiency matrix of the bank performance analysis consists of three partial matrices:

- (1) triangular matrix which elements are financial ratios characterizing proportions among the quantitative output indicators, and which are by their essence co-ordination ratios: NEER, NENIR, ENIR, NEIR, EIR, NIIR, NETIR, ETIR, NITIR, and ITIR - we named this triangular matrix as "output matrix";

- (2) triangular matrix which elements are financial ratios reflecting proportions among the quantitative input indicators, and which are also typical co-ordination ratios: EAER, EAR, EM - we named that matrix as “input matrix”;

Table 7. The Effectiveness Matrix of Estonian Commercial Banking System (1994-1997)

	EAT 68.7 288.5 513.9 964.1 1.876 14.033	EBT 83.6 329.6 564.1 1070.3 1.897 12.803	NIR 586.7 763.4 1025.9 1444.1 1.408 2.461	IR 878.6 1177.3 1722.9 2661.6 1.545 3.029	TOI 1307.7 1850.1 2761.1 4354.2 1.577 3.330	EA 6027.3 9721.3 14683.7 24513.2 1.669 4.067	BVE 673.2 1041.0 1744.9 3031.5 1.737 4.503
EBT 83.6 329.6 564.1 1070.3 1.897 12.803	NEER = =EAT/EBT 0.8218 0.8753 0.9110 0.9008 0.9888 1.0961						
NIR 586.7 763.4 1025.9 1444.1 1.408 2.461	NENIR = =EAT/NIR 0.1171 0.3779 0.5009 0.6676 1.3328 5.7011	ENIR = =EBT/NIR 0.1425 0.4318 0.5499 0.7412 1.3478 5.2014					
IR 878.6 1177.3 1722.9 2661.6 1.545 3.029	NEIR = =EAT/IR 0.0782 0.2451 0.2983 0.3622 1.2143 4.6317	EIR = =EBT/IR 0.0952 0.2800 0.3274 0.4021 1.2282 4.2237	NIIR = =NIR/IR 0.6678 0.6484 0.5954 0.5426 0.9113 0.8125				
TOI 1307.7 1850.1 2761.1 4354.2 1.577 3.330	NETIR = =EAT/TOI 0.0525 0.1559 0.1861 0.2214 1.1898 4.2171	ETIR = =EBT/TOI 0.06393 0.17815 0.2043 0.2458 1.2032 3.8448	NITIR = =NIR/TOI 0.4486 0.4126 0.3716 0.3317 0.8925 0.7393	ITIR = =IR/TOI 0.6719 0.6363 0.6240 0.6113 0.9796 0.9098			
EA 6027.3 9721.3 14683.7 24513.2 1.669 4.067	NREA = =EAT/EA 0.0114 0.02968 0.03500 0.03933 1.1237 3.4500	REA = =EBT/EA 0.01387 0.03390 0.03842 0.04366 1.1364 3.1478	NIEA = =NIR/EA 0.09734 0.07853 0.06987 0.05891 0.8432 0.6052	IEA = =IR/EA 0.1458 0.1211 0.1173 0.1086 0.9256 0.7449	TIEA = =TOI/EA 0.2170 0.1903 0.1880 0.1776 0.9448 0.8184		
BVE 673.2 1041.0 1744.9 3031.5 1.737 4.503	NROE = =EAT/BVE 0.1020 0.2771 0.2945 0.3180 1.0799 3.1176	ROE = =EBT/BVE 0.1242 0.3166 0.3233 0.3531 1.0922 2.8430	NIOE = =NIR/BVE 0.8715 0.7333 0.5879 0.4764 0.8103 0.5466	IOE = =IR/BVE 1.3051 1.1309 0.9874 0.8780 0.8892 0.6727	TIOE = =TOI/BVE 1.9425 1.7772 1.5824 1.4363 0.9077 0.7394	EAER = =EA/BVE 8.9532 9.3384 8.4152 8.0862 0.9609 0.9032	
TA 8240.7 12474.9 18379.4 30328.5 1.650 3.680	NROA = =EAT/TA 0.00834 0.02313 0.02796 0.03179 1.1369 3.8118	ROA = =EBT/TA 0.01014 0.02642 0.03069 0.03529 1.1499 3.4803	NIOA = =NIR/TA 0.0712 0.0612 0.05582 0.04762 0.8530 0.6688	IOA = =IR/TA 0.1066 0.09437 0.09374 0.08776 0.9362 0.8233	TIOA = =TOI/TA 0.1587 0.1483 0.1502 0.1436 0.9558 0.9049	EAR = =EA/TA 0.7313 0.7793 0.7989 0.8083 1.0117 1.1053	EM = =BVE/TA 0.08169 0.08345 0.09494 0.09996 1.0528 1.2237

Source: Author's calculations.

- (3) Quadratic matrix which elements are financial ratios characterizing proportions among different quantitative output and input indicators, i.e. these are typical intensiveness ratios, or traditional output/input-type efficiency indicators: NREA, REA, NIEA, IEA, TIEA, NROE, ROE, NIOE, IOE, TIOE, NROA, ROA, NIOA, IOA, and TIOA - we named that matrix as "output-input matrix" (do not confuse with Leontieff input-output type matrices).

More detailed analysis of Estonian banks' performance on the basis of these partial matrices is presented in Vensel (1998).

Conclusions

1. The development of the Estonian banking sector can be described by a quite rapid nominal growth of total assets, loan portfolios, generated net income. Although Estonian banking market is already quite concentrated, the consolidation process continued (and will continue during the last years. The capitalization of Estonian banks improved, and the share of non-residents in the share capital increased significantly.
2. Banks performance analysis is an important issue in the conditions of transition economies in the Central and Eastern European countries because the financial sector could play the key role in successful transition. The balance sheet and the income statement of the bank are the major sources for carrying out bank performance analysis. A modified version of the DuPont financial ratio analysis and the matrix approach, which usage makes it possible to follow interrelations between different financial indicators, seem to be more perspective, and are discussed in the paper.
3. Some empirical results of the usage both the DuPont financial ratio analysis and the matrix model for Estonian commercial banking system in 1994-1997 are presented in the paper. As Estonian banking system is developing rapidly, both input and output quantitative financial indicators have increased substantially during the last years. There was the overall falling of market-determined interest rates in Estonian banking market, interest spread decreased substantially which influenced the dynamics of various discussed financial ratios.
 1. The rise of Estonian commercial banking system performance efficiency, which reflects in the increase of the rate of return indicators, as return on assets (ROA) and return on equity (ROE), was caused mainly by the changes in the proportions between output indicators (for example, banks burden has decreased substantially). Traditional output/input-type efficiency ratios (interest or income on assets or on equity ratios) at the same time decreased substantially during the last two years.
 2. Initial quantitative financial indicators and respective matrix model used in this paper contain all needed information for carrying out different version and modifications of traditional financial ratio analysis, including DuPont financial ratio analysis. In addition, there is much more information for carrying out more profound banks performance analysis, which possibilities we partly illustrated in this paper.

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Stock Price Premia and Chinese Equity Market Segmentation

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1. Introduction

Stock market segmentation and stock price differences in emerging stock markets (ESMs) have been brought to much attention recent years. The governments of these emerging markets usually impose certain investment barriers in order to discriminate between domestic and foreign investors, particularly in order to keep firms within the domestic controls. Such investment restrictions are interesting because they place limits on the percentage of a firm's equity that foreign investors can hold. If investors seek high returns and international diversification, these investment barriers possibly discourage international equity investment. On the other hand, those investment barriers may benefit domestic producers and firms to help them to achieve profit maximization. Previous research shows that these barriers can have substantial effects on the equity prices (Stulz, 1981; Eun and Janakramanan, 1986; Hietala, 1989; Bailey and Jagtiani, 1994; Domowitz, Glen and Madhavan, 1997). Most of the existing evidence from some emerging equity markets suggests that the shares open to foreigners trade at higher price than those open to domestic investors.¹

Two categories of theoretical models can explain this relationship between stock price premia and market segmentation (Domowitz, Glen and Madhavan, 1997). The first category, which is known as liquidity models, explains the price differences by trading costs. The type of shares that is costly to hold and trade infrequently will trade at a discount relative to the other type of shares of low costs or actively traded. These models use market microstructure theory to investigate the bid-ask spread differences of different types of equity.

The bid-ask spread reflects mainly three costs, such as inventory costs, adverse selection costs and order process costs (Huang and Stoll, 1997). The second category includes the differential demand model and the differential valuation model. The differential demand model states that the differences in prices reflect the different price elasticities of the

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¹ Example of these countries are Finland, Indonesia, Korea, Malaysia, Philippines, Singapore, Switzerland, Mexico.

demand from various investor groups. The demand functions for domestic and foreign investors are different because of the deadweight costs that vary across countries (Stulz, 1981). The differential valuation model shows that the differences in prices reflect the differences in the underlying reservation prices of domestic and foreign investors. If one type of investors has a lower cost of capital and a higher valuation of the expected future cash flows of the firm, this type of shares will trade at a premium.

The evidence in the Chinese stock market is of interest since, unlike most emerging equity markets, the Chinese shares open to domestic investors (A shares) always trade at a high premium over those open to foreign investors (B shares). Why do Chinese foreign B shares trade at a discount, while foreign held shares in the other emerging markets trade at a premium? The explanation could be that: First, there are high differentials in liquidity between A and B shares. Secondly, B shares have a relatively low market capitalization compared with A shares. Finally, foreign investors require higher risk premium to hold B shares, which could be due to economic uncertainties and political risks.² Our first explanation relates to the liquidity model, while the second and third relate to the differential valuation model.

In this paper, we investigate the factors to determine the price differences between Chinese A and B shares. The evidence from a sample of forty-two firms issuing both A and B shares from either Shanghai Stock Exchange (SHSE) or Shenzhen Stock Exchange (SZSE) indicates the price premium for A shares is positively related to their liquidity (trading volume) or negatively related to their costs; the premium is negatively related to the firm's size; the relative supply of B shares has a positive impact on the premium, but not statistically significant. Thus, these results are consistent with the predictions from the liquidity, information and differential valuation hypotheses.

The rest of the paper proceeds as follows. Section 2 provides a general description of the Chinese ESMs. Section 3 presents the conceptual framework. Section 4 describes the data together with the econometric models. Section 5 gives the empirical results, and Section 6 concludes the paper.

2. Institutional Background

In China some enterprises have begun to raise capital directly by issuing bonds and stocks since 1980. The Chinese financial market has been developing very quickly since 1990 when the Shanghai Stock Exchange emerged. Financial market has been establishing and developing as the number of securities transactions has increased. The stock market capitalization relative to GDP increased from 4.8% in 1991 to 11% by the end of August 1996.

Foreign ownership restrictions are imposed by the government to ensure that the control remains in the hands of domestic nationals. Some firms issue multiple types of stock to differentiate between foreign and domestic investors who have different estimation of the same firm's cost of capital, liquidity and information availability sets (Bailey and Jagiani, 1994; Bailey, 1994).

² See World Bank, 1995, "China the Emerging Capital Market", *World Bank Report*.

Dual stock exchanges exist in China: Shanghai Stock Exchange (SHSE), which inaugurated in December 1990 and Shenzhen Stock Exchange (SZSE), which inaugurated in April 1991. Firms can choose to list in either of the two exchanges. Dual listing is forbidden. So far, there has not been any foreign firms listing in either of the two exchanges.

According to different investor groups and listing sites, four types of equity exist: (1) *A shares*³ are the ones restricted only to domestic investors and denominated in local currency, Chinese Yuan (CNY). (2) *B shares* are the ones restricted to foreign investors and denominated in US Dollar (USD) in SHSE and in Hong Kong Dollar (HKD) in SZSE. Although the rule is that A and B-share markets should be totally segmented, that is to say domestic investors are not allowed to trade B shares and foreign investors are not allowed to trade A shares, it is not strictly enforced. Domestic investors can still buy B shares through various channels⁴. A and B shares have the identical voting rights and the same rights for the claim of the firm's cash flow. The government puts strict restriction on the proportion of a firm's B-share issuing, which makes foreign takeover almost impossible⁵. Comparing with A shares, B shares are relatively less liquid. For A shares, clearing and settlement take one business day (t+1). Clearing and settlement for B shares take more days since only specialist brokers can be responsible for trading B shares. The order of trading B shares would be transferred among several brokers in different levels. This usually takes three business days (t+3). Besides, a few firms issue H and N shares: (3) *H shares* are the shares listed only in the United Stock Exchange in Hong Kong. (4) *N shares* are the shares listed in the New York Stock Exchange. Most firms issue only A shares and several issue only B shares, while some issue both A and B shares.

Chinese firms have seldom issued a second time in the original type of share market since the beginning of the stock market. Firms usually take one or more of the following three ways to distribute their profits to the shareholders: (a) dividend payments, (b) stock dividends, and (c) stock rights. Generally speaking, Chinese seasoned equity offerings (SEOs) are rights offerings. The initial public offerings (IPOs) for A and B shares are quite different. However, the seasoned equity offerings (SEOs) are almost the same. The IPO pricing for B shares uses an auction mechanism, which is unlike the IPO of A shares using the lottery mechanism. The foreign investment banks are invited to participate in the underwriting process of B-share issuing. In IPOs, firms usually issue B shares at a 50-70% larger discount comparing with A shares.

The China's securities markets are regulated by different authorities and by a series of regulations at the national and local level. A draft of national securities law has been under preparation since 1993, but still has not enacted. The new national Company Law, which came into effect on July 1, 1994, plays an important role nowadays. The securities regulations provide insider trading regulation, listing requirements, disclosure requirements, supervision of trade, etc. The Company Law gives the basic rights and

³ A firm's A shares can be further divided into four groups according to the ownership structure: (i) government shares, (ii) legal entity shares, (iii) employee shares, and (iv) market circulating shares.

⁴ Some evidences show that some domestic investors had still invested in B shares by difference means. They usually ask their relatives or friends abroad to send US Dollar or Hong Kong Dollar to an account that they had opened in the stock exchanges. The minimum amount required to open such an account was 5,000 US Dollar. Although they could not directly arbitrage between the A and B shares because of the foreign exchange restrictions imposed by the government, they could still trade these B shares.

⁵ Some people argue in this sense B shares are equivalent to those no voting rights shares.

protections to all shareholders. In the absence of a national securities law, the Company Law has some provisions that would usually be found in a securities law. Yet, the lack of a securities law has a lot of negative consequences.

3. Conceptual Framework

3.1 Liquidity Model

We simply assume that two investor groups have the same valuation of the firm's shares and the same risk aversion. We consider a domestic investor who can buy either an A share or B share.

The prices of A and B shares are determined by the consideration of fundamental value of the firm. Let this denote the percentage of bid-ask spread in A and B shares, respectively.

Thus, a buyer with value estimate V pays the ask price of $P(1 + \varphi)$ and expect to receive upon selling in the final period. For an investor to be indifferent between the two markets, the profits net of cost to buy A or B shares should be the same. This implies that

$$\left(\frac{v(1 - \varphi_A)}{P_A(1 + \varphi_A)} \right) = \left(\frac{v(1 - \varphi_B)}{P_B(1 + \varphi_B)} \right), \tag{1}$$

where P_A and P_B denote the prices of A and B shares, respectively. Rearranging Equation 1, we get

$$\frac{P_A}{P_B} = \left(\frac{1 + \varphi_B}{1 + \varphi_A} \right) \left(\frac{1 - \varphi_A}{1 - \varphi_B} \right). \tag{2}$$

Table 3: GDP structure and real growth rate in Vietnam (%)

	1987	1988	1989	1990	1991	1992	1993	1994	1995
GDP: (1)	3,6	5,9	8,5	5	6	8,6	8,1	8,8	9,5
state sector (1)	5,9	7,3	4,6	2,5	8,6	12,4	11,6	12,8	12,7
(1')	/	/	/	-7,7	3	8,8	11,7	13,6	/
(2)	35,8	32,5	33,2	32,5	33,3	36,2	39,2	40,2	42,3
non-state sector (1)	2,5	5,2	9,7	6,4	4,7	6,8	6,2	6,7	7,6
(2)	64,2	67,5	66,8	67,5	66,7	63,8	60,8	59,8	57,7
agriculture: (1)	-0,6	3,9	6,9	1,5	2,2	7,1	3,8	3,9	5,1
(2)	39,2	44,8	40,8	37,5	39,5	33	28,8	27,7	28,4
state sector (1)	13,1	8,5	-2,1	-22,9	2,1	1,7	6,3	6,3	7,8
(2)	4,7	3,4	3,3	3,3	2,7	2,6	2,6	2,7	4,7
non-state sector (1)	-1	3,7	7,2	2,3	2,2	7,3	3,7	3,8	5
(2)	95,3	96,6	96,7	96,7	97,3	97,4	97,4	97,3	95,3
industry: (1)	8,8	5,3	-2,6	2,9	8,7	13,5	12,8	13,6	13,9
(2)	29,7	25,5	24,2	23,9	24,8	28,2	30	30,7	30
state sector (1)	7,9	3,6	-4	5,4	10,4	18,6	14,7	14,5	14,5
(1')	/	/	/	-5,9	-1	10,1	14,7	17,1	/
(2)	61,3	60,3	60,1	60	61,4	62,8	63,7	63,3	67,7
non-state sector (1)	10,2	8,1	-0,4	-0,8	6	5	9,1	11,8	12,6
(2)	38,7	39,7	39,9	40	38,6	37,2	36,3	36,7	32,3
services: (1)	5,5	9,2	18,3	10,8	8,3	7	9,2	10,2	10,6
(2)	31,1	29,7	35	38,6	35,7	38,8	41,2	41,6	41,7
state sector (1)	3,3	11,2	13,8	2,1	7,4	7,5	8,8	11,3	11,1
(2)	50,7	52,7	49,4	44,2	47,5	45,5	46,9	48,1	51,3
non-state sector (1)	7,8	7,1	23	19,4	9	6,6	9,6	9,2	10,2
(2)	49,3	47,3	50,6	55,8	52,5	54,5	53,1	51,9	48,7

Source: World Bank

(1)= growth rate at 1989 prices; (1')= excluding oil; (2)= share at current prices

Result 1: *The price premium is an increasing function of the relative costs of trading in A and B shares. A positive price premium for A shares over B shares indicates the cost of B shares is higher, or B shares trade inactively.*

Large bid-ask spread implies high costs. These costs are in terms of inventory costs, order processing costs, and adverse selection costs. The inventory costs means dealers adjust the bid-ask spread according to their inventories. Carrying undesired inventory exposes to more risk. The order processing costs includes the expenses to close a trade (e.g., operating costs of trading, record keeping, etc.). The adverse selection costs arise because some investors are better informed about a security's value than the market-maker. The market-maker would probably loss if he trades with the better informed traders. It is difficult for the market-maker to distinguish the informed from uninformed traders. His losses with the informed traders must be covered by trading with the uninformed. Thus, a portion of the market-maker's bid-ask spread may be viewed as compensation for trading with the information-based traders. The adverse selection costs may also be viewed as a

kind of “winner’s curse”. The bid price you hit is the other’s ask price, *vs. verse*. The other side of the trader might be better informed than you.

3.2 Differential Demand and Valuation Models

The following two models mainly follow the work by Stulz and Wasserfallan (1995), Domowitz, Glen, and Madhavan (1997), with several modifications needed according to the Chinese situation. First, the foreign ownership restrictions are exogenously imposed by the government in China. Secondly, two investor groups are almost separated. Thirdly, these models can apply to the different pricing of IPOs and SEOs. Finally, these models do not concern the exchange rate effects because of a fixed exchange rate system in the country.

We consider a domestic corporation that issues A and B shares, subject to the constraint on foreign ownership imposed by the government that the total amount of A shares in the market must be larger than that of B shares. Both types of equity carry the same voting rights and dividends. We use *d* to represent domestic investors and *f* for foreign investors. The following assumptions are made throughout the rest of this section. Specific assumptions are stated before individual model:

A1: There are two mutually exclusive investor groups, domestic and foreign. The stock universe is separated into two mutually exclusive sets: A shares are restricted to domestic investors, and B shares restricted to foreign investors.

A2: All investors, both domestic and foreign, are risk averse and choose their portfolios solely on the basis of the expected value and variance of the probability distribution of the end-of-period portfolio value.

A3: All types of equity price are in terms of local currency. The model does not attack the problem of exchange risk since domestic country maintains a fixed exchange rate regime.

A4: Capital markets are perfect, i.e., there exist neither transaction costs, information costs nor taxation.

A5: All investors, both domestic and foreign, can borrow or lend in unlimited amounts at the risk-free interest rate.

The following terms and notations are used:

P_A Price of A shares (restricted to domestic investors)

P_B Price of B shares (restricted to foreign investors)

S^*_A Number of A shares outstanding

S^*_B Number of B shares outstanding,

where $S^*_A \geq S^*_B \geq 0$.

ΔS_A Supply of new A shares

ΔS_B Supply of new B shares

$S_A = S'_A + \Delta S_A$ Total A shares outstanding

$S_B = S'_B + \Delta S_B$ Total B shares outstanding

$D_A(P_A)$ Demand function for new A shares

$D_B(P_B)$ Demand function for new B shares,

then, the equilibrium price of A and B shares are given by the solutions to

$$D_A(P_A) = \Delta S_A; \quad D_B(P_B) = \Delta S_B.$$

The inverse demand functions for A and B shares are

$$P_A(\Delta S_A); \quad P_B(\Delta S_B).$$

3.2.1 Differential Demand Model

We assume the cost function for the firm to issue A and B shares are linear. This firm is going to solve the problem of

$$\begin{aligned} \max_{\Delta S_A, \Delta S_B} \quad & P_A(\Delta S_A(S_A, S'_A))\Delta S_A + P_B(\Delta S_B(S_B, S'_B))\Delta S_B \\ & - \mu(\Delta S_A + \Delta S_B) \\ \text{s.t.} \quad & S_A \geq S_B \\ & S_A > 0 \\ & S_B > 0 \end{aligned}$$

where μ is the linear cost function. Lagrangian multipliers corresponding to the restriction that total A shares outstanding must be equal or greater than B shares are

$$\begin{aligned} L = & P_A(\Delta S_A(S_A, S'_A))\Delta S_A + P_B(\Delta S_B(S_B, S'_B))\Delta S_B \\ & - \mu(\Delta S_A + \Delta S_B) - \lambda_1(\Delta S_B + S'_B - \Delta S_A - S'_A) \\ & - \lambda_2(-S'_A - \Delta S_A) - \lambda_3(-S'_B - \Delta S_B). \end{aligned}$$

The Kuhn-Tucker conditions corresponding to the maximization yields the following first-order conditions

$$\begin{aligned} \frac{\partial L}{\partial \Delta S_A} &= P'_A(\Delta S_A)\Delta S_A + P_A(\Delta S_A) - \mu + \lambda_1 + \lambda_2 = 0 \\ \frac{\partial L}{\partial \Delta S_B} &= P'_B(\Delta S_B)\Delta S_B + P_B(\Delta S_B) - \mu - \lambda_1 + \lambda_3 = 0 \end{aligned}$$

where λ' is the Lagrangian multipliers on the government constraint. First, $\lambda_1 \geq 0$ and $\lambda_2 = 0$, $\lambda_3 = 0$, since S'_A and S'_B are both > 0 . Secondly, the K-T condition says that if the supply of A shares is strictly bigger than B shares (i.e., $\Delta S_A + S'_A > \Delta S_B + S'_B$), $\lambda_1 = 0$, otherwise $\lambda_1 \geq 0$. Thus, if $\Delta S_A + S'_A > \Delta S_B + S'_B$, the optimization yield

$$P'_A(\Delta S_A) \Delta S_A + P_A(\Delta S_A) = \mu \quad (3a)$$

$$P'_B(\Delta S_B) \Delta S_B + P_B(\Delta S_B) = \mu \quad (3b)$$

In equilibrium, $D_A(P_A) = \Delta S_A$ and $D_B(P_B) = \Delta S_B$. Rearrange Equations 3a and 3b, and choosing ΔS_A and ΔS_B , we get the following final result

$$\frac{P_A}{P_B} = \begin{pmatrix} \varepsilon_a \varepsilon_b & - \varepsilon_a \\ \varepsilon_a \varepsilon_b & - \varepsilon_b \end{pmatrix}, \quad (4)$$

where $\varepsilon_a = -[\partial D_A(P_A) / \partial P_A][P_A / D_A(P_A)]$, and $\varepsilon_b = -[\partial D_B(P_B) / \partial P_B][P_B / D_B(P_B)]$. They are the price elasticities of demand for A and B shares. The entrepreneur here is a monopolist in the capital market and faces a downward-sloping demand curve.

Result 2: *A price premium for A shares can be due to the fact that the domestic investor's price elasticity of demand for the firm's A shares is lower than the foreign investor's price elasticity of demand for its B shares, given the total supply of this firm's A shares is strictly greater than B shares. It is optimal for the entrepreneur to sell shares at a higher price to domestic investors.*

The result is in line with the standard microeconomics. It says that if a producer can charge different prices to different customers who have different price elasticities of demand for the firm's product, this producer could achieve profit maximization. The various price elasticities of demand can result from the different close substitutes, investment opportunities to different investors. In China, local citizens are not allowed to freely exchange local currency to foreign exchanges. The A and B share markets are separated. There are few substitutes and investment instruments for the domestic citizens. To save with a bank and to buy government or corporate bonds are the only substitutes so far. Thus, the price elasticity of the demand from local investors is lower. It is obvious that foreign investors have more investment opportunities. B shares offer diversification benefit for them. Their valuations of the firm's shares are different from domestic investors, because they also consider the political risk, liquidity, etc. Thus, in the next section, we derive a differential valuation model.

3.2.2 Differential Valuation Model

We assume that the firm issues new shares in order to raise the maximum amount of equity capital, net of the expected capital costs in the form of the investments needed to make promised dividend. This firm is going to pay a stochastic dividend $\tilde{\theta}$ on both types of equity. This firm has access to a constant returns to scale investment technology where an investment of μ yield an expected one-period payoff of $E[\tilde{\theta}] > \mu$. We assume both domestic and foreign investors are risk averse. For the domestic (foreign) investor, he maximizes the mean-variance expected utility function as follows:

$$E[u_d(\tilde{W}_d)] = E[-\exp(A\tilde{W}_d)], \quad E[u_f(\tilde{W}_f)] = E[-\exp(A\tilde{W}_f)].$$

For the domestic (foreign) investor, end-of-period wealth is a random variable given by

$$\tilde{W}_d = E_d[\tilde{\theta}]Q_A - P_A Q_A + \tilde{y}_d; \quad \tilde{W}_f = E_f[\tilde{\theta}]Q_B - P_B Q_B + \tilde{y}_f,$$

where Q_A is the amount of shares purchased by the domestic investor and Q_B is the amount of shares purchased by the foreign investor. \tilde{Y}_d is the stochastic income from other domestic assets, and \tilde{Y}_f is the stochastic income from other foreign assets. They are normalized to have zero mean. \tilde{W}_d and \tilde{W}_f are assumed normal. We maximize the following two equations with respect to Q_A and Q_B :

$$E[\tilde{W}_d] - \frac{1}{2} A_d \text{Var}(\tilde{W}_d) = E(E_d[\tilde{\theta}]Q_A - P_A Q_A) - \frac{1}{2} A_d (\sigma_{\theta_d}^2 Q_A^2 + 2Q_A \sigma_{\theta_d, y_d} + \sigma_{y_d}^2)$$

$$E[\tilde{W}_f] - \frac{1}{2} A_f \text{Var}(\tilde{W}_f) = E(E_f[\tilde{\theta}]Q_B - P_B Q_B) - \frac{1}{2} A_f (\sigma_{\theta_f}^2 Q_B^2 + 2Q_B \sigma_{\theta_f, y_f} + \sigma_{y_f}^2)$$

The demand functions of these two types of investors are

$$Q_A = \left(\frac{E_d[\tilde{\theta}] - P_A - A_d \sigma_{\theta_d, y_d}}{A_d \sigma_{\theta_d}^2} \right)$$

$$Q_B = \left(\frac{E_f[\tilde{\theta}] - P_B - A_f \sigma_{\theta_f, y_f}}{A_f \sigma_{\theta_f}^2} \right).$$

The above two equations can be re-written as

$$D_A(P_A) = \alpha (V_d - P_A) \quad (5a)$$

$$D_B(P_B) = \beta (V_f - P_B), \quad (5b)$$

$$\text{Where} \quad \alpha = \frac{1}{A_d \sigma_{\theta_d}^2} \quad \beta = \frac{1}{A_f \sigma_{\theta_f}^2}.$$

They are the positive constraints, and

$$V_d = E_d[\tilde{\theta}] - A_d \sigma_{\theta_d, y_d} \quad V_f = E_f[\tilde{\theta}] - A_f \sigma_{\theta_f, y_f}.$$

These are interpreted as the “valuations” placed on the company’s earnings by domestic and foreign investors. Specifically, the valuations reflect the expected dividends adjusted for their value in portfolio diversification. A_d is the coefficient of absolute risk aversion for domestic investor, and A_f is the coefficient of absolute risk aversion for foreign investor. σ_{θ_d, y_d} denotes the covariance of the stochastic dividend with the asset income of domestic investor \tilde{Y}_d , and σ_{θ_f, y_f} is the covariance of the stochastic dividend with the asset income of foreign investor \tilde{Y}_f .

Further, if we aggregate, defining $N_d(N_f)$ the total member of domestic (foreign) investors, and $\sigma^2_{\theta_d}(\sigma^2_{\theta_f})$ the conditional variance of the asset's payoff from the viewpoint of domestic (foreign) investors, we get

$$\alpha = \frac{N_d}{A_d} \sigma^2_{\theta_d} \quad (6a)$$

$$\beta = \frac{N_f}{A_f} \sigma^2_{\theta_f}. \quad (6b)$$

Thus, the demand coefficients α and β decrease with risk aversion and increase with the number of investors.

Now, we go back to the price premium again. Equations (5a) and (5b) can be written as

$$P_A = V_d - \frac{D_A}{\alpha} \quad (7a)$$

$$P_B = V_f - \frac{D_B}{\beta}. \quad (7b)$$

The first-order condition are

$$P'_A = -\frac{1}{\alpha} \quad (8a)$$

$$P'_B = -\frac{1}{\beta}. \quad (8b)$$

Substitute Equations (7a) and (7b), (8a) and (8b) into (3a) and (3b), we get

$$\begin{aligned} -\frac{1}{\alpha} \cdot \Delta S_A + V_d - \frac{D_A}{\alpha} &= \mu \\ -\frac{1}{\beta} \cdot \Delta S_B + V_f - \frac{D_B}{\beta} &= \mu. \end{aligned}$$

In equilibrium, e.g., $D_A = \Delta S_A$ and $D_B = \Delta S_B$, so

$$\Delta S_A = \frac{\alpha}{2} (V_d - \mu) \quad (9a)$$

$$\Delta S_B = \frac{\beta}{2} (V_f - \mu). \quad (9b)$$

Finally, substituting Equations (8a) and (8b), (9a) and (9b) into (7a) and (7b), we get

$$\frac{P_A}{P_B} = \left(\frac{1 + r_d}{1 + r_f} \right), \quad (10)$$

where we define $r_f = \frac{V_f}{\mu} - 1$, $r_d = \frac{V_d}{\mu} - 1$. They are the returns of two investor groups, respectively.

Results 3: *The equilibrium price ratio is a function of the domestic to foreign valuations of the returns adjusted to the cost of capital. A positive premium for A shares implies that domestic investors have higher valuations of the returns than foreign investors.*

4. Data and Econometric Specification

4.1 Empirical Design

In the previous section, we presented a liquidity model, a differential demand elasticity model and a differential valuation model. In the liquidity hypothesis, the price premium results from the different costs of different types of stock. Since it is known that the bid-ask spread is inversely related to the trading volume, the liquidity model implies that the A-share price premium is an increasing function of the A share trading volume. Thus, an empirical proxy for this relative liquidity measure across firms is just the ratio of the trading volume difference⁶. The actual shares outstanding should have little additional effect on the price premium. Besides, the price premium may also be negatively related to a firm's market capitalization. Small firms' shares are illiquid and costly to hold so we would expect the A-share price premium for them to be larger. The information hypothesis (Bailey and Jagitani, 1994) argues that the foreign investors prefer to invest in larger firms where there are better financial disclosure and information availability. Thus, according to this hypothesis, low market capitalization firms would have large premia as well.

In the differential demand elasticity model, the firm charges different investors different prices for the same good because their price elasticities of demand are various. This model explains the different IPO pricing for A and B shares in China. For A shares, a lottery mechanism is used, while, for B shares, an auction mechanism is used. There exists a 50-70% larger discount for B shares comparing with A shares in the IPOs. Since the investment opportunities for domestic investors are fairly restricted, the price elasticity of the demand from them is lower. Thus, the demand for A shares is extremely large. Therefore, we can see that firms do discriminate between these two investment groups in order to maximize the profits⁷. In the differential valuation model, an increase in A-share price premium over time suggests that domestic investors put more value on the firm than foreign investors so the differential valuation hypothesis predicts a positive relationship between the A share premium and the demand for these A shares. Besides, an exogenous increase of the supply of B shares enlarges the premium. The evidence in the Chinese market shows the demand for B shares was large at the initial B-share market. Yet, the demand did not increase as much as the supply later on. Probably, foreign investors regard investment in an emerging market as a kind of portfolio diversification. They do not put as much value as domestic investors because of economic uncertainties and political risk⁸.

In both models, autocorrelation may arise because a firm's premium today possibly depends on the past premium. So two econometric models are specified in Section 4.3.

⁶ It is unable for us to get the bid-ask spread data so we use this proxy.

⁷ We do not empirically test the price elasticity of the demand from these two investment groups in this study.

⁸ See World Bank, 1995, "China the Emerging Capital Market", *World Bank Report*.

4.2 Data

The data sets used in the following study include most of the firms issuing both A and B shares in either SHSE or SZSE. Forty-two firms are included, among which, 23 are from SHSE and 19 from SZSE⁹. We have three samples, which are weekly, monthly and quarterly in frequency. These samples all cover the same period from July 1993 to June 1997. Before 1993, there were not many firms issuing B shares. The first firm that listed its B shares at the Chinese equity market is Shanghai Vacuum Electron Devices Co. Ltd., on February 21, 1992. B shares are denominated in different currencies in different exchanges. They are denominated in US Dollar in SHSE and in Hong Kong Dollar in SZSE. Meanwhile, A shares in both exchanges are denominated in local currency, Chinese Yuan. In order to compare the prices of A and B shares, we use the exchange rate of Chinese Yuan to US Dollar and Chinese Yuan to Hong Kong Dollar to convert all the process of B shares into local currency. Since the fixed exchange rate system is used¹⁰, we need not to worry about the changes of that. The data sets are from several sources, mainly from *The Information of Chinese Stocks and Futures*¹¹; EXTEL equity research data bases; EXTEL company research data bases; yearly reports from SHSE and SZSE, 1993-1997, respectively.

The variables used in the study are:

ARA Average return for A shares.

ARB Average return for B shares.

AVA Average trading volume for A shares.

AVB Average trading volume for B shares.

PREM Premium. This variable measures ownership restrictions. Specifically,

$$\text{PREM}_i = \frac{P_{A,i} - P_{B,i}}{P_{B,i}}, \text{ where } P_{A,i} \text{ and } P_{B,i} \text{ are A-share and B-share prices of firm } i,$$

respectively. A positive PREM indicates an A-share premium, while a negative sign indicates a discount.

APREM Average price premium for A shares.

VRATIO The ratio of trading volume in A shares to total shares (A shares plus B shares). It is a proxy for the relative liquidity in A shares and B shares.

$$\text{VRATIO}_i = \frac{V_{A,i}}{V_{B,i} + V_{A,i}}, \text{ where } V_{A,i} \text{ and } V_{B,i} \text{ are the A-share and B-share trading volumes of firm } i, \text{ respectively.}$$

AVRATIO The average ratio of trading volume in A shares to total shares.

⁹ See Appendix.

¹⁰ Before January 1, 1994, there had been dual exchange rates: one official rate in the bank and the other in the swap market. Before January 1, 1994, we use the swap rate in this study.

¹¹ a CD jointly published by Shanghai Security Daily, Shanghai Xian Zi Information Co. Ltd. and Shanghai Electronic Publish Co. Ltd., July, 1996.

MKCAP Market Capitalization. The market capitalization for a firm's A shares plus B shares. It measures the size of a firm.

BRATIO The ratio of outstanding B shares to the total shares. It measures the relative supply of B shares.

Table 1 contains descriptive statistics of the weekly, monthly and quarterly samples, covering the period from July 1993 to June 1997, with 42 firms. Figures 1 and 2 plot the weekly series of A-share price premium and the ratio of A-share trading volume to the total trading volumes. The weekly sample contains 190 observations, or 190 weeks, since it is in time series structure. The monthly and quarter samples have the observations of 1036 and 474, respectively. They are arranged in the panel-data structure. The panels are unbalanced for these 42 firms have entered into the stock markets in different years. We use the weekly sample for time series analysis and quarterly sample for panel-data analysis. The results from the monthly and quarterly samples are very similar so we only report the results from the quarterly one.

Figure 1. Weekly Average A-Share Price Premia

The following figure plots the weekly average A-share price premium of 42 firms in either SHSE or SZSE with 190 observations, June 1993 - June 1997.

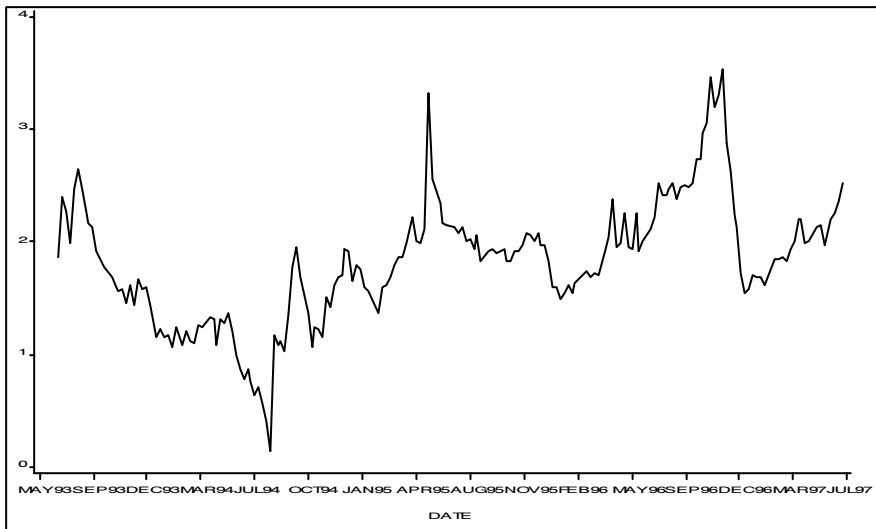


Figure 2 Weekly Average Ratio of A Share to the Total Trading Volume

The following figure plots the weekly average A- and B-share trading volume differences for 42 firms in either SHSE or SZSE with 190 observations, June 1993 - June 1997.

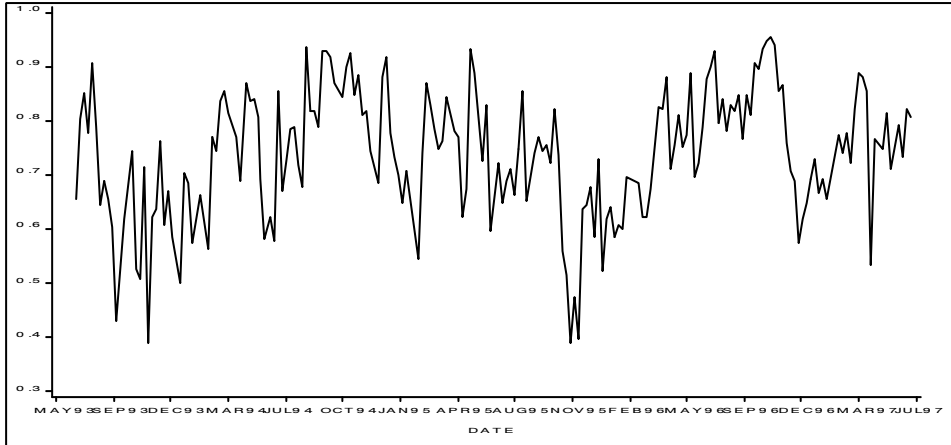


Table 1. Descriptive Statistics

The following table reports the means and standard deviations (in parentheses) of these three samples in this study from July 1993 - July 1997, with 42 firms. The variables are: APA, an average return for A shares; APB, an average return for B shares; AVA, average A share trading volume; AVB, average B share trading volume; (A)PREM, the (average) ratio of the price of A shares to B shares; (A)VRATIO, the (average) ratio of trading volume in A to A plus B shares; MKCAP, market capitalization, in term of Chinese Yuan (billion); BRATIO, the ratio of outstanding B shares to total shares.

Variable	Weekly sample N=190	Monthly sample N=1036	Quarterly sample N=474
ARA	-0.1391 (8.2983)		
ARB	-0.1871 (6.1905)		
AVA	0.5330 (0.6065)		
AVB	0.2328 (0.2462)		
APREM	1.8321 (0.5557)		
AVRATIO	0.7380 (0.1188)		
PREM		2.1835 (1.4715)	2.1788 (1.5112)
VRATIO		0.7312 (0.2899)	0.7571 (0.2724)
MKCAP		2.4464 (3.3140)	2.4624 (3.3102)
BRATIO		0.2690 (0.1001)	0.2700(0.0999)

T-test for the mean difference of ARA and ARB: p = 0.9431; T-test for the mean difference of AVA and AVB: p = 0.0001;

Table 2. Yearly Aggregate Price Premia and the Ratio of A share Trading Volume to the Total Trading Volume

The following table reports the means, medians and standard deviations of the weekly sample, July 1993 - July 1997, with 42 firms. The series are: APREM, the average ratio of the price of A shares to B shares; AVRATIO, the average ratio of trading volume in A to A plus B shares.

Variables	1993	1994	1995	1996	1997
	N=24	N=49	N=46	N=49	N=22
Mean of APREM	1.8673	1.2067	1.9715	2.2415	1.9831
Median of APREM	1.7381	1.2122	1.9540	2.2304	1.9823
Std. of APREM	0.4044	0.3775	0.2934	0.5354	0.2515
Mean of AVRATIO	0.6530	0.7767	0.7019	0.7672	0.7546
Median of AVRATIO	0.6492	0.7895	0.7235	0.7818	0.7656
Std. of AVRATIO	0.1279	0.1050	0.1178	0.1157	0.0820

It seems possible that the market segmentation will result in the difference in the returns for the two types of equity. In Table 1 we find that the difference is not that much, -0.1391 for A shares, and -0.1871 for B shares. We further perform a T-test to test whether the mean difference of these two share series is significantly from zero. The p-value is 0.9431, indicating there exists no significant differences in the returns of A and B shares. We can find that the A shares are more liquid than B shares because the A-share trading volume (0.5330) is more than twice larger than B-share (0.2328). A p-value of 0.0001 indicates the difference between these two series. The variables for the premium are all statistically and economically significant, suggesting that investment barriers are a source of market segmentation. The premia for A shares are obvious since all the observations are positively signed in Figure 1. We can see that the standard deviations for the variables for market capitalization (MKCAP) are extremely large. We do not adjust it using one of the conventional ways, (e.g., delete the observations out of the range of the sample means plus or minus two times the sample standard deviations), otherwise a lot of information and observations could be lost. The average premium from the weekly sample is 183% and the average trading volume ratio is 0.738. The premia could be different both across firms and over years. Since we would expect a positive relationship between the premium and the ratio of the trading volume according to the liquidity hypothesis, we further calculate these two series means in different years. They are reported in Table 2. We can notice that the relationship is almost clear with the exception of the year 1994. The largest premium (224%) and highest volume ratio (0.767) exist in 1996. The smallest premium and volume ratio are in 1993 (186% and 0.653, respectively).

4.3 Econometric Models

In the rest of the section, we are going to specify two econometric models based on the hypotheses stated in Section 1 to capture the premium and market segmentation. First, we are going to build a time series model. We use the weekly aggregate time series data to conduct Granger causality tests between the series of the premium and the ratio of the trading volume difference. Secondly, we are going to specify a dynamic panel mode using a Generalized Method of Moment (GMM) estimator for the quarterly sample. The first one reflects short-run, while the second reflects the long-run.

4.3.1 Time Series Model

We test Granger causality between the series of the premium and the volume ratio. Formally, the tests are as follows:

$$APREM_t = \sum_{k=1}^n \alpha_k AVRATIO_{t-k} + \sum_{k=1}^n \delta_k APREM_{t-k} + \varepsilon_{1,t} \quad (11)$$

$$AVRATIO_t = \sum_{k=1}^n \beta_k APREM_{t-k} + \sum_{k=1}^n \phi_k AVRATIO_{t-k} + \varepsilon_{2,t} \quad (12)$$

where APREM is caused by ARATIO provided that some α is not equal to zero in Equation (11). Similarly, ARATIO is caused by APREM provided that some β is not equal to zero in Equation (12). If both these events occur, then feedback effects exist. To implement the Granger-causality test, F-statistics are calculated under the null hypothesis that both α and β are zero.

4.3.2 Dynamic Fixed Effects Model

A dynamic panel model is going to be specified to investigate the hypotheses. The dynamic panel-data techniques are used since the variables we are interested in are vary both over time and across firms. Collineality probably exists among the right hand side variables, i.e., a firm's size and the liquidity of its shares. Usually, large firm's shares are more liquidity than small firm's. Autocorrelation might also exist in individual variable (e.g., a firm's premium of last period could be correlated with that of this period). In order to take care of the above problems, we use a Generalized Method of Moments (GMM) estimator to our unbalanced panel. We consider a dynamic fixed effects model as the following:

$$PREM_{it} = \beta_1 PREM_{i,t-1} + \beta_2 VRATIO_{i,t} + \beta_3 BRATIO_{i,t} + \beta_4 MKCAP_{i,t} + d_t + \alpha_i + v_{i,t} \quad (13)$$

where the subscript i refers to the firm and t refers to the time period. V_{it} is the residuals.

d_t and α_i are time and firm-specific effects. According to Bond and Meghir (1994), these firm and time effects can be non-random. This should be the character of our samples as well since in China the government restricts the total number of B-share issuing firms each year. The quality of the issuing firm is strictly examined. The lagged depended variable and the other right-hand side variables of (13) are necessarily correlated with the firm-specific effects. Therefor, we use a two-step Generalized Method of Moments (GMM) estimator developed by Arellano and Bond (1991). The unobserved firm-specific effects can be eliminated by transforming the data either by 'orthogonal deviations' or difference backwards. We deal with the sample by taking the first difference and using the lagged variables as instruments. If $v_{i,t}$ in (13) is MA(q), where $q \geq 1$, then only the values of untransformed regressors of $t-s$ for $s \geq 2+q$ are valid instruments in the transformed equation for the time t . In our empirical work, we investigate the instruments of $t-2$ and $t-3$. We find the instruments of $t-3$ are valid.

In Equation (13), β_1 is expected to be positive since a firm's premium of this period may positively affect that of the next period. The predictions from both liquidity and differential valuation hypotheses show that β_2 should be significantly positive. β_3 is expected to be positive for a relative increase of the B-share supply enlarges the premium. Finally, β_4 should be negative according to both liquidity and information hypotheses.

Table 3. Unit Root Test

APREM is defined as an average of the price premium of A shares over B shares. ARATIO is the ratio of an average of A share trading volume to the total trading volumes. The time series contains 190 observations.

Variable	ADF t-value	Lag	Order of Integration
APREM	-4.6246	2	0
AVRATIO	-7.0107	2	0
Critical Values: 5%=-3.44, 1%=-4.01; Constant and Trend included			

Table 4. Autoregressive Models for the Granger Causality Test

APREM is defined as an average of the price premium of A shares over B shares. ARATIO is the ratio of an average of A share trading volume to the total trading volumes. The time series contains 190 observations.

	AVRATIO causing APREM (2 Lags)	APREM causing AVRATIO (2 Lags)
F-value	4.1227 (0.0179)	0.3276 (0.7211)

The probability values are in parentheses.

6.4 Empirical Results

For the time series analysis, we begin by considering the statistical properties of the series. Table 3 presents Augmented Dickey-Fuller unit root test, where the unit roots are immediately rejected at 1% level for both series, indicating these two series are I(0) or stationary. In Table 4 we report the Granger-causality test. The models include two lags for both series. The F-statistics from the autocorrelation models show that there exists only one-way causality. The trading volume difference series causes the price premium series. This result is in line with the predictions from the liquidity and differential valuation hypotheses. However, we do not get the right signs of the parameters we are interested in. These parameters are reported in Table 5. We find these two coefficients for the lagged trading volume difference variables are negatively signed (but statistically insignificant). According to the liquidity hypothesis, given the fixed liquidity of B shares, an increase of the liquidity of A shares should enlarge the premium. According to the differential valuation hypothesis, an increase of the demand for A shares would enlarge the premium as well. And we would expect positive signs here. Thus, the time series analysis does not seem to favor both hypotheses. Possibly, some other firm specific factors that influence the premium are missing in this simple liquidity equation. Next, we try to include those factors in it.

Table 5. Autoregressive Model Results

This table contains the parameter estimate from the following autoregressive models.

$$APREM_t = \sum_{k=1}^n \alpha_k AVRATIO_{t-k} + \sum_{k=1}^n \delta_k APREM_{t-k} + \varepsilon_{1,t}$$

$$AVRATIO_t = \sum_{k=1}^n \beta_k APREM_{t-k} + \sum_{k=1}^n \phi_k AVRATIO_{t-k} + \varepsilon_{2,t}$$

where *t* indexes observations by week and *k* indexes lag. APREM is defined as an average A share price premium over B share. ARATIO is the ratio of an average A-share trading volume to the total trading volume.

Variable:	Dependent Variable: APREM	Dependent Variable: AVRATIO
Constant	0.3837 (0.4502)	3.8112 (0.0000)
APREM _{t-1}	0.9405 (0.0000)	0.0622 (0.7961)
APREM _{t-2}	0.0289 (0.0048)	-0.1309 (0.5305)
AVRATIO _{t-1}	-0.0123 (0.2754)	0.7843 (0.0000)
AVRATIO _{t-2}	-0.0141 (0.1868)	-0.0531 (0.3600)
	F[19, 164] = 165.64 (0.0000) AR 1-2 F[2, 162] = 1.8745 (0.1567) ARCH 1 F[1, 162] = 3.2768 (0.0721) Normality Ch χ^2 [2] = 3.6941 (0.1577) X χ^2 F[23, 140] = 1.1473 (0.3039) RESET F[1, 163] = 0.5833 (0.4461)	F[19, 164] = 23.475 (0.0000) AR 1-2 F[2, 162] = 1.9841 (0.1408) ARCH 1 F[1, 162] = 1.7048 (0.1935) Normality Ch χ^2 [2] = 0.4137 (0.8132) X χ^2 F[23, 140] = 0.7335 (0.8064) RESET F[1, 163] = 2.4382 (0.1204)

The probability values are in parentheses. The test statistics are asymptotically standard normal with degrees of freedom in brackets.

In Table 6 we report the parameter estimates of the dynamic fixed effects model of (13). The instruments are all the variables with three lags. Column (i) reports the first-step estimates, and (ii) reports the second-step. The tests for the first (*m*₁) and second (*m*₂)-order autocorrelation do not reject the specification at 5% level for both steps. The Wald tests, which are the tests of zero for all betas (*z*₁), are significant for both steps. The Wald tests for the joint significant of the time dummies (*z*₂) are all significant for both steps as well. The Sargan statistics reject the first-step but not the second-step.

In the column (ii) of Table 6 we notice that the coefficient on the lagged premium is positive and statistically significant, which also indicates a strong first-order autocorrelation in this variable. The coefficient for the ratio of the trading volume is positive and highly significant. This is consistent with the predictions from both liquidity and differential valuation models. The liquidity hypothesis states the price differences between the two types of equity are due to the trading costs. B shares are costly-to-hold and trade infrequently so they trade at a discount relative to the low-costs and frequently traded A shares. We know that there exists a negative relationship between the bid-ask spread and the trading volume. Given the trading volume in B shares fixed, the larger the trading volume in A shares, or the more liquid of the A shares, the larger will the price

premium be. The differential valuation model says the premium reflects the differential valuations from these two investor groups. Since domestic investors put more value on the firm, their demands for the firm's A shares are larger. This enlarges the premium. The coefficient for the firm size in terms of market capitalization, MKCAP, is negative and statistically significant as well, indicating liquidity hypothesis is also favored here. Those shares for large firms are usually more liquid so their premia are smaller. Besides, the negative effect of MKCAP favors the information hypothesis by Bailey and Jagtiani (1994) and consistent with their findings for Thailand. The negative effect of MKCAP is also consistent with findings of Domowitz, Glen and Madhavan (1997) for Mexico. The foreign investors would like to invest in large firms because these firms provide better information. The B share ratio, a proxy for the relative supply of B shares, BRATIO, is not statistically significantly deferent from zero. However, it is with a right sign (i.e., it is positively related to the premium). An increase of the B-share supply shifts the supply curve downwards and decreases the B-share prices; thus enlarges the premium. The insignificant of BRATIO is probably due to the fact that it is fairly stable over time and across firms. In our sample, the B-share issuing ratio across the firms is within 10%-43%. In China, the local currency is not freely exchangeable. Firms prefer to issue and issue more B shares since it is the other way to raise foreign capital. Yet, they can not issue more than the proportion limited by the government. The aggregate supply of B shares is limited and the total number of firms allowed to issue B shares is also limited.¹² In addition to the model above, we estimate the alternative one by dropping BRATIO. The model is rejected by the Sargan test. The result is not reported here.

The probability values are in parentheses. The test statistics are asymptotically standard normal with degrees of freedom in brackets. m_i is a serial correlation test of order i using residuals in first difference. z_1 is a test of joint significance of the coefficient, and z_2 is a test of joint significance of the dummies. The Sargan test is the test of the overidentifying restrictions (See Sargan, 1958).

In summary, the results from the time series analyses seem only show the right causality, but the parameter estimates are not consistent with the liquidity, information and differential valuation hypotheses; the results from the dynamic panel-data model are consistent with our theoretical predictions.

Table 6. GMM Estimation of the Dynamic Fixed Effects Model

This table contains Generalized Method of Moments (GMM) coefficient estimates of the following panel data model. Column (i) reports the first-step estimates and Column (ii) contains the second-step.

$$PREM_{it} = \beta_1 PREM_{i,t-1} + \beta_2 VRATIO_{it} + \beta_3 BRATIO_{it} + \beta_4 MKCAP_{it} + d_i + \alpha_i + v_{it}$$

¹² Besides satisfying requirements stated in the Chinese securities regulations, an issue of B shares must also meet the following conditions: (i) It must obtain approval from the relevant authorities for the organizational changes; (ii) It must prove that it will have enough foreign exchange income to cover the foreign exchange cost, for example B-share dividend payments; (iii) The proportion of B shares issuing must be not exceed the limit which the government puts.

where i indexes firm and t indexes time. The variables are: PREM, ratio of the price of A shares to B shares; VRATIO, the ratio of trading volume in A to A plus B shares; MKCAP, market capitalization; BRATIO, the ratio of outstanding B shares to total shares.

Dependent variable: Sample period:	PREM July 1993 - June 1997	42 firms, 474 observations
Data frequency: Quarterly	(i)	(ii)
Constant	-0.9396 (0.0000)	-0.7873 (0.0000)
PREM _{<i>i,t-t</i>}	0.2669 (0.0000)	0.2523 (0.0000)
VRATIO _{<i>i,t</i>}	1.5856 (0.0000)	1.7510 (0.0000)
BRATIO _{<i>i,t</i>}	25.377 (0.2420)	19.533 (0.1875)
MKCAP _{<i>i,t</i>}	-0.0385 (0.2928)	-0.0503 (0.0008)
m1	-4.112 (0.008)	-2.663 (0.008)
m2	0.817 (0.852)	1.588 (0.112)
z1	17.875 [4] (0.001)	166.714 [4] (0.000)
z2	42.793 [8] (0.000)	778.126 [8] (0.000)
Sargan test	65.413 [28] (0.000)	37.293 [28] (0.113)
Instruments	t-3	t-3

6.5 Conclusion

In this paper, we examine the ownership restrictions in the Chinese emerging financial markets. The evidence from Chinese two stock exchanges, Shanghai Stock Exchange (SHSE) and Shenzhen Stock Exchange (SZSE), shows that A shares (open to domestic investors) trade at a large premium over B shares (open to foreign investors). These premia vary over time and across individual firms. Theoretically, the existing and variation in premia can be explained by various theoretical hypotheses. We have specified a time series and a dynamic panel-data model to investigate the factors to affect the premia in the short- and long-run.

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Appendix: Firm

This table contains names of companies, industry classifications for these 42 firms we are studying in this paper.

	Firm	Industry
Panel A: Shanghai Stock Exchange		
1	Shanghai Vacuum Electron Devices Co. Ltd.	Electronics
2	Shanghai Dazhong Taxi Co. Ltd.	Service
3	Shanghai Wingsong Co. Ltd.	Manufacture
4	China First Pencil Co. Ltd.	Manufacture
5	China Textile Machinery Co. Ltd.	Manufacture
6	Shanghai Rubber Belt Co. Ltd.	Manufacture
7	Shanghai Chlor-Alkal Chemical Co. Ltd.	Chemistry
8	Shanghai Tyre & Rubber Co. Ltd.	Manufacture
9	Shanghai Refrigerator Compressor Co. Ltd.	Manufacture
10	Shanghai Jian Qian Export Processing Zone	Manufacture
11	Shanghai Outer Gaoqiao Free Trade Zone Development	Trade
12	Shanghai Jin Jiang Tower Co. Ltd.	Manufacture
13	Shanghai Forever Co. Ltd.	Manufacture
14	Shanghai Phoenix Co. Ltd.	Chemistry
15	Shanghai Haixia Co. Ltd.	Electronics
16	Shanghai Yao Hua Pilkington Glass Co. Ltd.	Manufacture
17	Shanghai Daijiang (Group) Co. Ltd.	Manufacture
18	Shanghai Diesel Engine Co. Ltd.	Chemistry
19	Shanghai Hero Co. Ltd.	Manufacture
20	Shanghai Goods & Materials Trade Center Co. Ltd.	Trade
21	Shanghai Narcissus Electric Appliances Industrial Co. Ltd.	Electronics
22	Shanghai Lujiazui Financial & Trade Zone Development Co. Ltd.	Finance, Trade
23	Shanghai Huaxin Cement Co. Ltd.	Manufacture
Panel B: Shenzhen Stock Exchange		
24	China Vanke Co. Ltd.	Manufacture
25	Shenzhen Gintian Industry Co. Ltd.	Manufacture
26	Shenzhen Properties & Resources Development (Group) Co. Ltd.	Real Estate
27	China Southern Glass Holding Co. Ltd.	Manufacture
28	Shenzhen Petrochemical (Group) Co. Ltd.	Chemistry
29	Shenzhen Zhonghao (Group) Co. Ltd.	Manufacture
30	Shenzhen China Bicycles Company (Holding)	Manufacture
31	Victor Onward Textile Industrial Co. Ltd.	Manufacture
32	Shenzhen Shen Bao Industrial Co. Ltd.	Manufacture
33	Shenzhen Chiwan Wharf Holdings Ltd.	Shipping
34	Shenzhen Zhao Shang Harbor Service Holdings Co. Ltd.	Service
35	Shenzhen Tellus Machinery & Electronics Co. Ltd.	Manufacture
36	Shenzhen Fiyta Holdings Co. Ltd.	Manufacture
37	Shenzhen Health Mineral Water Co. Ltd.	Chemistry
38	Shenzhen Special Economic Zone Real Estate and properties (Group) Co. Ltd.	Real Estate
39	Shenzhen Lionda Holdings Co. Ltd.	Manufacture
Panel B: Shenahan Stock Exchange		
40	Shenzhen Nanshan Power Station Co. Ltd.	Energy
41	China International Marine Containers Ltd.	Service
42	Shenzhen Textile (Holdings) Co. Ltd.	Manufacture

We find the emerging equity market segmentation in China is effective. Firms try to achieve profit maximization by charging domestic and foreign investors different prices for the price elasticities of the demand from these two investor groups are various. Our empirical results from the time series analysis do not favor the liquidity hypothesis in the sense that although the model shows right causality, i.e., the liquidity difference causes the price premium, it shows the opposite signs of the coefficients that we are interested in. Then, by adding more firm specific variables to the right-hand side of the liquidity equation and controlling both over time and across firms, our dynamic panel-data specification can not be rejected. The results favor the liquidity, information and differential valuation hypotheses. Specifically, we find the premium for A shares is positively related to their trading volumes, or negatively related to their costs. The premium is also negatively related to the firm's size. The relative supply of B shares affects the premium positively, but not statistically significant, probably because of the stability of this variable over time and across firms.

Central European Manufacturing: Catching up through FDI

Gábor Hunya

1. The Region

This paper covers five central European countries, the Czech Republic, Hungary, Slovakia, Slovenia (CEEC-4) and Austria. They share a long common historical past in the framework of the Austrian empire, but were separated and to a large extent alienated after WW-I. Later they found themselves on the two opposing sides of the post WW-II iron curtain. Austria became an advanced market economy deeply integrated into the European corporate networks and joined the European Union in 1995. The others, former COMECON or Yugoslav countries started economic transformation to introduce a functioning market economy in 1989-1990.

The CEEC-4 are the most advanced among the transition countries in terms of per capita GDP and together with Estonia and Poland, also in terms of economic transformation. They have association agreements with the EU which means basically free trade for non-food manufactured goods and the possibility to join the EU in the future. They started accession negotiations in April 1998, with the exception of Slovakia which has been left out mainly for political reasons. The CEEC-4 are connected to each other by the trade liberalisation pact CEFTA. All the five central European countries are small, open economies, open both in terms of foreign trade and in terms of the affiliation of their companies to international alliances. All of them, also Austria, have been net direct capital importers. They use the inflow of foreign direct investment, technology and skills as a vehicle of economic modernisation. CEEC-4 are among the leading targets of FDI among the transition countries (Table 1).

The links among the five countries are less intensive than to their common primary trading partner, Germany. Companies from Germany, together with USA based multinational enterprises (MNEs), are among the most important direct investors in all the five countries (Table 2). But Austria is also a prominent trading partner for the CEEC-4 too. For the two smaller countries - Slovenia and Slovakia - Austria is the first and second largest investor, respectively, with about one quarter of the foreign capital invested there. For Hungary and the Czech Republic, larger countries with more diversified international links, Austrian FDI is at place 4 and 7, with below 10% of the invested capital. (The capacity of Austria as an investing country is not subject to our analysis which deals only with inward FDI in the five countries.)

There is a recovery of trade and investment among the CEEC-4 in recent years without reaching the artificially high trade shares of the COMECON years.

2. FDI and Catching up

A major task for the CEEC-4, eager to join the EU, is to diminish the development gap between their economies and the EU average. The gap is there in several fields, income, trade, institutional, technology, human capital.

CEEC-4 income levels are considerably lagging behind the EU average. Even the two most advanced applicant countries, the Czech Republic and Slovenia, have real per capita GDPs somewhat below 60% of the EU average (at purchasing power parity). This is less than currently in both Greece and Portugal, (67% of the EU average), but not much different from those before the latter's accession to the EU. Slovakia (43% of the average EU per capita GDP) and Hungary (37%) are much less developed. As the income gap is larger than the human capital gap, competitive advantage appears in the field of high quality labour intensive production. The structural analysis of FIEs confirmed the tendency for intensive foreign penetration in such branches.

Catching up with the EU's average income level by the year 2015 (assuming 2% annual growth in the EU) would require 5% annual growth in the two more advanced CEEC and about 7-8% growth per year in Slovakia, Hungary. Attaining 75% of the EU's average GDP by 2015 would demand lower and therefore perhaps more realistic annual growth rates: Czech Republic 3.4%, Hungary: 6.1%, Slovak Republic 5.2%, and Slovenia 3.4% (Richter et al., 1998). High growth rates and shorter catching up scenarios may become feasible in case of massive capital imports and stepped up restructuring.

Theory gives no general guideline concerning the catching-up effects of FDI. Neo-classical theory maintains that international factor movements lead to overall welfare gains provided the production factors are fully mobile. International factor movements are induced by factor-price differentials. As a consequence low-income regions will catch-up, provided they attract those factors which, because scarce, have a high-marginal productivity.

Under liberalized conditions the rate of return on capital together with a risk-related premium determines the size and direction of international capital flows (Lizondo, 1990). Beside factor costs, transaction costs appear on the cost side. Legal, political, economic provisions and conditions influence the magnitude of risk. On the basis of changing cost and risk perception, foreign capital is in constant search for favourable location. Once the initial factor-price advantage shrinks (e.g. wages go up) production may move to new locations. Other activities may come instead which use a different combination factors (e.g. instead of simple labour more knowledge).

Modern approaches on catch-up and convergence (Nunnenkamp, 1997) argue that even under conditions of mobility, agglomeration tendencies and a polarisation between high and low income-regions are possible. The tendency to agglomeration emerges because of technological externalities and limited diffusion of knowledge, which create spill-over in those regions where human capital and technology are abundant factors.

Consequently, mobility of production factors will not lead to convergence, but may instead aggravate the lagging behind of low-income regions. In addition the mobility of production factors is usually limited. Investing companies in FDI projects have a controlling position and usually integrate the affiliates into their international production networks. For these reasons

costs and risks are considered in a longer term perspective and from the specific viewpoint of MNEs. Costs and risks influence more the location of new investment projects than of established ones which are not very flexible to move, although relocations are on the increase world-wide.

International competition has two specific impacts on the role of foreign capital and the position of business in a country: First, the deepening economic integration of markets and states, by reducing transaction costs, opens new possibilities for internalising transactions into companies internationally and thus favours large MNEs. Secondly, it gives impetus for an increased mobility of firms optimising their international portfolio via relocation. Both features imply, that firms have several immobile elements in the value-added chain, which cannot be separated easily from the business location (e.g. localised learning, institutional environment, human capital). Only financial capital is footloose - real capital has a high degree of location specificity. The chance for a any business location among them for CEECs lies in the fact that the location-specific elements often are the high value-added elements.

FDI can contribute to closing income and other gaps through a bundle of impacts on CEE host economies. We mention here five, not in the order of importance. The first of the impacts is the direct capital transfer adding to available investment means. The second is the transfer of knowledge in the form of management, know-how and technology contributing significantly to the restructuring of firms.

As a result of these inflows micro-economic restructuring takes place which results in increasing profits and improved growth potential. Third, FDI re-arranges the industry structure, foreign trade structure and thus the specialisation patterns of a country and the enhanced allocation of resources contributes to growth. Fourth, the interest of foreign capital for a country is a good proof for its advance in transformation, tolerable investment risk, good economic growth potential. FDI can be a self-generating process through demonstration effect and agglomeration effects. Fifth, the inflow of FDI capital may ease the foreign financing constraints of an economy.

Correcting FDI inflow figures for the sum spent on acquisition of existing assets we get the direct contribution of FDI to gross fixed capital formation. Own calculations and estimations show that the contribution of direct capital inflows to gross fixed capital formation 1993-1996 was 10-16% in Hungary, 2-3% in the Czech Republic and in Slovenia, 1% in Slovakia. These shares are small with the exception of Hungary, but economic growth can be rapid, nevertheless. As half or more of the FDI in CEECs was spent on privatisation-acquisition, the efficient investment of public revenues from privatisation will in part determine the impact of FDI. More positive effects can be expected from follow-up investments of MNEs in the enterprises acquired through privatisation. Privatisation related acquisition has some features of a green-field investment if most of the productive lines and organisation is changes by the new owner.

As technological development takes place to a large extent within multinational enterprises, economic growth depends on the successful integration of a country's enterprises into international corporate networks. Countries relying heavily on FDI in the take-off period of economic growth, like Austria, can benefit from imported technology while focusing domestic research on adaptation. While multinationals may not bring the most advanced technology to their investments in medium developed countries, such as the CEECs, they mostly transfer technologies more advanced than those locally available.

But technology-import inside MNEs can be limited as they try to prevent leakages and positive externalities. (Meyer, 1997) Thus while the firm may gain from relocation to CEECs, the country may not. Borensztein et al. (1995) emphasise the crucial role of human capital and suggest that while FDI is in fact an important vehicle for the transfer of technology, contributing to growth in larger measure than domestic investment, FDI is more productive than domestic investment only when the host country has a minimum threshold stock of human capital. Thus catching-up is most likely from low-medium to high-medium technological levels. The successful country must have a sufficient local knowledge-base and learning and adaptation capacity to cope with technology import. CEEC-4 generally have these conditions which makes them (plus Poland and Estonia) different from south-east European and CIS countries. CEECs having the appropriate knowledge base are able to develop the institution framework, and are also more successful than others in terms of economic transformation, catching-up, and attracting FDI. There seem to be positive feed-backs between these three processes although their progress may differ.

Priewe (1997) raises doubt that positive effects of FDI suggested by theory will materialise in CEECs because of (a) the conflict between motives of investors and expectations of host countries; (b) replacement rather than expansionary FDI; (c) transfer of low-end value-added stages; (d) limited spill-over from FIEs to domestic firms etc. His arguments are mainly based on the experience of less developed FSU countries and may be less valid to more advanced transformation economies.

3. Basic Features of FDI in CEECs

CEEC-4 received 1.1% of global FDI in 1996. The seven East-Central European countries listed in Table 1 attracted some USD 10.7 bn in 1995, 9.2 bn in 1996 and almost 11.7 bn in 1997. The recent upswing is due to more privatization sales in Poland, Romania and Bulgaria. In line with theory-based expectations, more advanced, stable and open countries have been the most attractive FDI targets also among the Central and East European transition countries (CEECs) in the 1990s. The Czech Republic, Hungary, and Slovenia as well as Poland and Estonia have attracted considerable amounts of FDI either in volume or in comparison to their size. That this group of countries has been more attractive than others is the result of their better macroeconomic performance and stability together with a faster pace of institutional transformation. The relative amount of FDI within the group has mainly to do with the progress and method of privatization.

The size of FDI inflow can be compared to gross fixed capital formation, and FDI stocks to GDP. The world average of FDI inflow compared to gross fixed capital formation is 5% (1995) and there are only 20 countries where it exceeds 20%. Hungary stands out with a rate of over 20% FDI per gross fixed capital formation in each year between 1992 and 1997. The Czech Republic in 1995 and Poland in 1997 came close to this mark but also the others, except Slovakia, are above the world average. Extremely high rates can appear due to a depression of nation-wide investments, like in Bulgaria in 1997. The world average for FDI stocks to GDP is about 10% (1995), which is exceeded in 1997 by five countries out of the CEEC-7 in Table 1. Hungary is in the group of countries with the highest FDI stock per GDP in the world. The Czech Republic and Slovenia are average countries only Slovakia is lagging behind.

The distribution of FDI by economic activities (Table 3) reflects the opening up of individual sectors to foreign investment. Initially most FDI went into trade and manufacturing; later also the financial sector caught up. In countries where new sectors have been opened to foreign

investment through the advance of privatization, the share of manufacturing declined below 40%. The most notable cases were telecommunications in the Czech Republic and also the gas and energy sector in Hungary. In Slovenia, where several activities are still closed to foreign investors and the manufacturing sector was privatized mainly to domestic owners, the energy sector has remarkably high share due to the atomic power station jointly owned with Croatia. The major subsequent part of this paper deals only with the FDI in the manufacturing sector.

Liberalization and integration enlarge the possibilities for a country to gain from international capital flows, but does not ensure that the effects will be positive on the long run. The long term impact of FDI on development is critically dependent on three variables:

- the type of FDI undertaken,
- the structure of the indigenous resources and capabilities of countries concerned,
- the macro-economic and organizational policies pursued by governments.

The type of FDI has to do with the spill-over effects and the possibility of a subsidiary to upgrade its competitive position. Local resources and skills must be maintained and continuously improved. The host country must conduct policies which lead to an upgrading of the country as a business location in order to benefit from FDI on the long run.

The method of entry is a characteristic feature of FDI in CEECs. About half of the FDI in CEECs was invested through privatization-related acquisitions. Some 10-20% were green-field investments, the rest being investment into existing foreign investment enterprises. Mass privatization by vouchers, sale to insiders, or to the management have hindered foreign take-overs, whereas in direct sale tenders foreigners usually outbid domestic investors (see for details Hunya 1997). The main method of privatization has boosted FDI in Hungary and hindered it in the Czech Republic, Slovenia or Slovakia. Foreign sales were allowed in the latter countries too but restricted to few individual cases.

In 1994-1996 we had rapidly growing economies with small amounts of FDI (Slovakia, also Poland) and slowly growing Hungary with massive inflow of FDI. In the former group economic growth could be stimulated by domestic demand and financed from domestic earnings. In Hungary the inflow of foreign capital could only mitigate the 1995-1996 recession, but the investment activity of foreign affiliates has contributed to overcoming the crisis. More recent positive economic development in Hungary (also Poland) can be associated with the results of earlier foreign capital inflows. Slower economic growth in the Czech Republic and Slovenia and the upcoming crisis in Slovakia can be associated with a slow pace of economic restructuring in the absence of less than necessary foreign capital.

4. The Database on Foreign Investment Enterprises

The following analysis is based on a Phare-ACE project has linked researchers from the five countries to set up a joint framework to study the way and impact of FDI penetration. We investigated the trends of FDI inflows, the economic policy environment of FDI and the lessons of other research projects in the field. We have set up a database comparing the performance and characteristics of foreign investment enterprises with domestically owned enterprises in the manufacturing industries. We came to conclusions concerning the foreign penetration patterns, industrial and foreign trade specialization, capital and technology transfer and the prospects of EU integration.

The foreign penetration in CEE manufacturing can be expressed as the share of foreign affiliates in the economy as a whole by various indicators. Data are available for a somewhat larger group of companies than truly foreign controlled affiliates. Companies with some foreign share in their nominal or equity capital, foreign investment enterprises (FIEs), were sorted out from national databases which contain data of the income statements of companies. The remaining companies are classified as domestic enterprises (DEs). Including minority foreign ownership may not distort the picture significantly, because even in such affiliates the foreign investor usually has a control over the management and the trend of foreign investment is to go in for majority or exclusive ownership. In the case of Hungary (for the years 1995, 1996) and Slovenia the coverage could be limited to companies with at least 10% foreign ownership which corresponds the internationally accepted definition of FDI. For the other countries, companies with even lower foreign share had to be included.

The database on FIEs is biased towards large companies. While in Hungary, Slovenia and Austria only very small ventures fall out, most of the data for the Czech Republic cover only companies with 100 or more employees, and for Slovakia companies with 25 or more employees. In the two latter countries the comparison of data for these larger FIEs with the few available data for FIEs of any size reveals that small companies in manufacturing have little influence on the average penetration rates.

Small and large companies in the Czech Republic are evenly present among FIEs and DEs. Companies with 100 or more employees cover 75% of the total employment, 84% of sales, 89% of investments. But small FIEs have a different structure by industries than larger ones. More than half of the FIEs in the industries clothing and wood have less than 100 employees, but only 10% in the car industry. Despite the methodological problems, there is a high coverage of enterprises and comparison between countries can also be allowed.

Most of the problems emerged with the compilation of the database for Austria. There is no systematic match between the FIE data and overall industrial data, not even the industrial classification of the two sets is identical. The computation efforts led to a more or less acceptable result in the case of output and employment, but no further indicators are available for individual industries.

Due to the above limitations in coverage, the number of manufacturing FIEs in the database in 1996 is the following: 284 for the Czech Republic, 4312 for Hungary, 272 for Slovakia and 286 for Slovenia. Relatively small numbers in the Czech Republic and Slovakia are due to the size limit. In Austria 647 FIEs were found for 1995 which is by 82 less than it was five years earlier due to mergers in the foreign sector and very few new entries.

Foreign investment enterprises do not have a big share in the number on manufacturing enterprises, the maximum set by Hungary is about one fifth. Slovenia stands out with very low, below 5% share of FIEs. The circumstances to establish a new foreign venture or acquire a domestic company are not favorable here so the foreign sector is confined to a small number of companies. There is an increase in the number of FIEs in the Czech Republic and Slovakia which may partly be due to the fact, that there is a minimum size above which companies were included in the database (100 and 25 employees) and the growth of employment in FIEs has shifted smaller enterprises into the survey sample.

Employment in domestic enterprises (DEs) has generally been on the decrease, which if reduces employment below the threshold, make companies fall out from the sample. The two countries which do not have this minimum size problem, Hungary and Slovenia, show a fairly constant share of FIEs by number. In Hungary the lower FIE numbers in 1995 and 1996

compared to the previous two years is due to the 10% foreign threshold. All these limitations suggests, that the database has certain weaknesses to show changes in time. A panel survey is planned for a later stage of research to get rid of the problem caused by changing coverage.

5 Foreign Penetration in Manufacturing

5.1 Basic Features of Foreign Penetration in CEEC-4

The relative size of the foreign sector compared to the domestic sector is larger by all other indicators than by the number of enterprises. This is because the size of FIEs is generally larger than of domestic companies in terms of employees per company and even more so in terms of nominal capital or assets per company.

The size of the foreign penetration is shown by the share of FIEs in nominal capital, assets, value added, employment, sales, export sales, investment outlays and profits (Tables 4-21). The indicators, nominal or own capital, sales or output, employment and investment outlays are available for all the four countries. An increasing role of FIEs has been present for all the countries and by all indicators in the period 1993-1996. This is in part due to the change in company coverage described earlier, but an expansion of the foreign sector in comparison with the domestic cannot be denied. The highest share of FIEs by all indicators has been reached by Hungary. This is on average three times higher than the penetration rate in the Czech Republic, the two others having even somewhat lower foreign penetration rates. The foreign penetration in Austria is of much earlier origin and its level is between that of Hungary and the Czech Republic. The most dynamic increase has been recorded in the Czech Republic. There is steady but relatively slow increase of foreign penetration in Slovenia. In Slovakia there was a more dynamic period until 1995, and less increase of FIE shares in the following year.

Comparison of the development of foreign penetration over time can be made for 1993-1996 keeping in mind the distortions caused by shifts from the domestic to the foreign sector. The upswing of foreign capital in manufacturing in Hungary took place already before 1994, when the FIEs' share in nominal capital reached 60%, and only slightly increased since then. The same refers to the employment share of FIEs which stagnates at 37% since 1994, partly due to the changes of computing the number of employees. The investment share of FIEs came close to 80% in 1994 and increased only slightly in the following two years. It seems that the foreign penetration in Hungarian manufacturing has already reached a level where further increase cannot be very dynamic.

There is nevertheless still very intensive FDI activity as capital increase in existing FIEs and the number of important green-field projects growing. Sales and especially export sales were the indicators by which the share of FIEs increased fastest between 1994 and 1996. This indicates that the intensive investment activity of the first half of the 1990s established competitive production capacities which can increase sales both in Hungary and abroad more rapidly than Hungarian owned companies lagging behind in terms of restructuring.

Foreign penetration in the Czech Republic almost doubled between 1994 and 1996 by most indicators. The foreign sector shows rapid expansion not only in terms of capital and sales but also in terms of employment. Fifty-thousand new manufacturing jobs were created in, or

shifted to the foreign sector, while the domestic sector lost 85 thousand. The sales shares of FIEs increased in a period of overall recovery in the Czech manufacturing following the transformation recession. Sales of FIEs increased by 130%, while of domestic enterprises by 14% (in current USD terms). Although ownership shifts cannot be sorted out, it seems that the foreign sector was an important driving force of the recovery in the mid 1990s. The upswing of car sales due to the success of the car manufacturer Skoda after being acquired by Volkswagen has been the most important single case.

Slovakia had in 1993, 1994 somewhat more intensive foreign penetration than the Czech Republic, but in 1996 the situation changed. Due to the worsening climate for FDI (increasing political risk, new privatization policy) in Slovakia, foreign penetration lost momentum. Slovenia has never had a foreign-investment-friendly policy and the privatization policy of the last few years did not allow foreign take-overs. Most of the larger FIEs of 1996 were established several years earlier. Increasing shares of FIEs is thus due mostly to their better performance and more dynamic growth of the foreign sector compared to the domestic.

Labor productivity in FIEs is on average as much as two times higher than in DEs. In this respect there is no significant difference between the CEEC-4 countries in 1996. The gap between FIEs and DEs does not increase over time in the Czech Republic, decreases in Slovenia, and increases in Hungary. The high and increasing productivity gap in Hungary shows on one hand the gain foreign ownership means to the economy, on the other hand it demonstrates an unhealthy duality between the booming foreign sector and the stagnating domestic sector. The generally weak performance of the domestic sector is all the more problematic as it employs almost two thirds of the manufacturing labor force producing less than 40% of output. The success indicators of FIEs reflect the failures of the domestic sector which has not been able to restructure rapidly enough and was less successful on foreign markets. Thus it was also more severely hit by the 1995 stabilization package.

As endowment with capital and also labor productivity are higher in the FIE sector than in the domestic owned enterprises the expectation is confirmed that the foreign investors use more recent, capital intensive and labor saving technology. It also reflects the concentration of FDI in manufacturing branches with high capital intensity. FIEs pay, on the average of manufacturing, higher wages than domestic companies. They can afford to employ the younger and better trained part of the workforce which contributes to their high productivity.

The lead of FIEs in terms of capital intensity is especially pronounced in Hungary where capital intensive industries (e.g. steel industry, oil refineries) were more accessible to foreign investors than in the others. The relative capital intensity of FIEs, measured by the amount of nominal capital per employee, grows over time in Hungary and Slovenia and a decline in the Czech Republic measured by own capital. As to the difference in the amount of assets per employee, there has been an increase in the Czech Republic and Slovakia and decline in Slovenia.

The outstanding export performance relative to output indicates that FIEs are more export-oriented than domestic firms. This is confirmed by 1996 data in Hungary and Slovenia and by 1994 data also for the Czech Republic and Slovakia. Contrary to most survey results indicating that FDI in CEECs was mainly motivated by local market penetration, the activity of FIEs turns out to be somewhat different. In Hungary FIEs give more than three

quarters of manufacturing exports and the distance of export intensity between the domestic and the foreign sector has been growing.

FIEs contribute more than proportionately to fixed investment outlays. This is a confirmation of the positive effect of FDI on economic growth and restructuring. Investment data also suggest that foreign investors rapidly restructure the acquired manufacturing firms. Rationalization of production is generally connected with lay-off. Foreign penetration thus may increase unemployment in the short run. Stepped up investment activities of FIEs was confirmed by recent company surveys in CEECs too (Szanyi 1997). Investments of FIEs are mostly financed by retained profits, which thus may not be repatriated on a massive scale. Although the current account shows an increasing profit transfer of FIEs, their profit-reinvestment is also growing. As long as CEECs remain favorable locations for FDI in terms of expected profit, there is no reason why most profits should be repatriated. Internationally competitive corporate tax rates like the 18% practiced in Hungary are certainly of advantage to keep profits in the country.

The rate of profit is much higher in FIEs than in DEs, as loss-making is hardly tolerated by foreign owners albeit in the starting period of a project. In 1996 92% of the profit in the Czech manufacturing was earned by FIEs and 90% in Hungary. In Slovakia DEs made losses, while FIEs earned profits. Based on the evidence derived from case studies, Central European countries do benefit from the transfer of advanced technology, management and marketing knowledge. Macro-economic developments suggest that FDI has contributed to the upgrading of production and export structures (Hunya 1997). The positive effects of FDI are far from uniform, a number of negative cases can be quoted. Also short-term problems emerge due to fast restructuring in terms of capacity destruction and the lay-off of workforce. These generate social and regional inequality in the host country and a surge of foreign trade deficits.

5.2 Comparison to OECD Countries

A wider international comparison of FDI penetration can be made based on a 1996 OECD survey concerning the share of FIEs in production and employment (Table 22). The comparison cannot be accurate as the data for OECD countries refer to various years in the 1988-1992 period, to years before the recent upswing of world-wide FDI, and there are also a number of methodological differences between countries. It is also unfortunate that the foreign penetration in the south European and south-east Asian countries cannot be included in the comparison. Keeping all this in mind, some general conclusions can be drawn. There is a distinct group of countries, comprised of Hungary, Ireland, Canada and Austria which have significantly higher penetration rates than the rest of the countries surveyed. In these countries the share of FIEs in manufacturing production is around or above 50%, and in employment about 35%. These are all relatively small economies, especially in comparison to a dominant neighbor. The three OECD countries are examples for catching up by FDI: they have been net importers of FDI capital and have had rates of economic growth above the OECD average. It is early to say if Hungary will be able to follow their example.

In a second group of countries with medium intensity of foreign penetration (20-25% FIE share in production) we find large, advanced OECD countries, like France, the United Kingdom and Italy. These have large amounts of both inward and outward FDI. Also the remaining three of the CEEC-4 are in this group in terms of FDI penetration, but not in terms of capital exports.

The group of countries with low intensity of foreign penetration is very heterogeneous. We have here Germany, a type of country usually found in the second group. There are also advanced small open economies like Denmark and Finland which may also be in the first group. These are different from group 1 countries concerning the strength of the local companies which were big enough to avoid a foreign take-over. There had been also restrictions for foreign take-over.

Seeing the characteristics of OECD countries on the whole, there is no correlation between FDI penetration and GDP growth. Countries have been successful with both foreign and domestic ownership. Similar differences of patterns are also present in Asia (Korea vs. Malaysia) and CEECs (Slovenia vs. Hungary). FDI has a positive growth impact but it is not absolutely necessary for sustained economic growth. Its role can be different depending of historical geographical and institutional circumstances. Recently there has been general trend for more openness towards FDI world-wide.

The comparison of FIE penetration rates by production and employment in OECD countries' manufacturing confirms that FIEs have higher than average productivity in each country. This has several reasons. Those companies which invest into another advanced country are the top companies of their branch with superior productivity compared to host country firms. Making use of the international division of production can increase overall productivity and also the productivity of each subsidiary. Another factor can be the general specialization of the foreign sector in industries using advanced, labor saving technologies. Thus the total factor productivity (difficult to measure) of FIEs and DEs can be similar. High labor productivity is often matched by lower capital productivity. In addition, subsidiaries may lack some of the labor intensive departments connected to management and research which are present in full fledged domestic companies.

The lead of FIEs in terms of labor productivity is thus not specific to CEEC-4, but the size of the productivity gap is especially large in their case. In most OECD countries the productivity advantage of FIEs compared to the average productivity of the manufacturing industry is 30%, in the CEEC-4 70-90%. (Naturally, the smaller and more specialized the FIE sector, the larger its lead over the average productivity in the country.)

In addition to the general factors contributing to higher productivity of subsidiaries, there are some peculiarities in FIEs operating in CEECs. In transition economies FIEs usually represent a special quality in technology, management and marketing, more superior compared to domestic, especially state owned enterprises. The productivity advantage exists both in technical terms and in terms of higher output value due to higher sales prices. These can be achieved by better marketing, western brand names, etc. If the FIE sector is very different from the domestic, the two segments of the economy may find difficult to co-operate and the foreign sector functions as an enclave. In this case direct spillover effects do not exist, only through the income and knowledge of individual employees. At the same time, there is a learning process going on in domestic owned companies which may with time lead to narrower FIE/DE gaps.

6. Foreign Penetration by Manufacturing Industries

Shares of FIEs in equity, employment, and sales can be used as indicators of measuring the intensity of foreign penetration of the individual manufacturing branches. The most widely available indicator, sales shares are used below to demonstrate the branch specific penetration of manufacturing industries (Table 23).

The main common branch with above-average foreign penetration in CEEC-4 is the manufacturing of transport equipment, most notably of motor vehicles. The new or rapidly modernizing car industry was attracted both by unsatisfied domestic demand and by favorable conditions for low-cost production. The second such branch is the manufacturing of electrical machinery and equipment. The production of drinks and tobacco, if separately identified in the industrial classification, have also high foreign penetration. The tobacco industry is almost totally foreign-owned in the Czech Republic, Hungary and Slovenia. Above-average shares of FIEs in output thus appear both in domestic- and in export-oriented industries. There is nothing very specific in this orientation of foreign penetration as it is totally identical with the trend in Austria. The FIE sector in this country is even more concentrated on the two leading branches.

In the Czech Republic the most intensive foreign presence, with two-thirds of the output supplied by FIEs can be found in the car industry, followed with over 40% by the production by the production of non-metallic minerals and the rubber and plastics industry. FIEs in the branches, electrical machinery, of radio and TV sets, printing and publishing, food - beverage - tobacco and medical etc. instruments have also shares over 20% in output. Foreign penetration intensified between 1994 and 1996. The share of FIEs increased in all activities, in some of them very significantly: radio, TV sets, fabricated metals. None of the shares became higher than in the case of Hungary, but some of them have come close it: rubber and plastic, non-metallic minerals, motor vehicles. The distribution of foreign presence remained uneven, there are still eight industries where the share of FIEs remains below 10%.

In Hungary FIEs have high shares in most manufacturing activities. The highest foreign penetration is in the petroleum branch which is dominated by one single company. The foreign share on MOL is growing but remained dispersed. The tobacco industry was totally privatized to competing multinationals. In some export-oriented activities of machine building FIEs control four fifth or more of output: electrical machinery, motor vehicles and more than 70% of the industries other transport equipment, radio and TV sets. The latter applies also in chemicals and printing plus publishing. As for other branches, foreign ownership may be less than average, but still significant in an international comparison like the 50% in the food and the textile industry. The share of FIEs in the sales of textiles, apparel and leather industry is about 45% in Hungary, which is rather high in international comparison. In other CEECs trade and co-operation agreements are usually more common than take-overs to integrate manufacturers of the light industries into multinational networks. The reason may be that in the early 1990s most Hungarian companies were in financial difficulties. The only hope for survival was a foreign take-over. The crisis-hit steel and metal industries were still mainly in domestic, i.e. public hands in 1996. The pace of change concerning the industry composition of FIEs in Hungary is relatively small. There was some intensification of foreign penetration in the chemical industry and the production of machinery and transport equipment in recent years.

Summing up the above listed characteristics, the size of foreign penetration in CEEC-4 depends of industry-specific features and of the characteristics of the privatization policy. FDI in CEECs follows world-wide characteristics in the corporate integration of industries, technology-intensive electrical machinery and car production are the main targets. Foreign capital also penetrated activities with relatively stable domestic markets, e.g. in the food, beverage and tobacco industries. Privatization by sales attracted FDI to all industries in Hungary, but only to few in other countries. The foreign presence remained relatively small in branches with great structural difficulties, oversized capacities, like the steel industry.

Foreign direct investment helped CEECs to shift their product structure to become more similar to more developed EU countries. This may give further impulses to economic growth and narrow the development gap between the more advanced CEECs and the EU. Some results are already at hand. CEEC-4 plus Poland and Estonia are those CEECs which have been able to expand their exports to the EU in reaction to fast growing demand there.

7. FDI and EU Eastern Enlargement

Among the CEECs the five countries selected for the first round of EU enlargement (the Czech Republic, Estonia, Hungary, Poland, Slovenia – CEEC-5) have been the most attractive targets of FDI. The annual inflow of USD 10 bn and the total FDI stock of over USD 50 bn corresponds to the size of the CEEC-5. They receive about 3% of the annual world-wide FDI and close to one tenth of the EU members' direct investment into non-EU countries. About three quarters of the FDI in CEEC-5 originate from EU based multinational companies.

Since the liberalization of East-West trade and capital flows, an intensive micro-economic integration is on the way between the present and future EU members. EU investors in CEEC-5 benefit from the access to new markets and from low-cost production facilities. As shown by data for three of the first tier accession countries and Slovakia, foreign investors make use of the lower labor cost in CEECs, but their primary targets are capital intensive industries with generally high degree of internationalization (e.g. the motor industry and the production of electric machinery). FDI has generated trade between CEECs and EU countries with a deficit on the eastern side. Through the trade with CEECs, EU countries generated income on their current account and their economies benefited from a demand pull. The current account surplus was partly balanced by increasing capital export to CEECs. Part of the FDI projects helped to supply the markets of CEECs especially in the food industry as well as in financial services and retailing. These investments generate additional business and also jobs in the home countries of the investors. Another part of FDI meant the sourcing out part of the production to lower-cost locations. While this generated further exports of components, it also strengthened the international competitive position of EU firms. This is especially the case for small and medium-size companies in Germany and Austria for which the proximity of new markets and production locations matter more than for global oriented multinational corporations. Successful foreign investment projects in CEECs increase the profits of investing firms and if repatriated, also the tax-base in EU countries. On the other hand, CEE host countries of intensified FDI activity undergo accelerated restructuring of capacities, jobs and regional specialization. In the process of restructuring, local and temporary losers appear both in the EU and in CEECs. The treatment of the emerging problems must therefore be local and temporary without hindering the overall deepening of integration.

When discussing the impact of regional integration on FDI Dunning (1994) distinguishes between primary and secondary effects. As a primary effect intra-regional trade becomes more attractive, companies outside the integration move part of their production within the borders of the integration thus FDI increases. Companies inside the integration would adjust locations to benefit most from free trade. As a consequence FDI would decrease in some countries and increase in others. As a secondary affect appearing later in time, reduced risk and lower transaction costs would increase the overall mobility of capital in the integrated area. Cantwell (1992) pointed out, that as a reaction to the single European market MNEs

developed regional corporate networks and alliances. Bloström (1997) points out that an integration between developed and less developed areas can generate a boom of FDI both from within and from outside the integrated area while this is not the case if only developed or less developed countries set up an integration. The more change an integration agreement generates in terms of trade and investment liberalization between the member countries the more change in investment patterns can emerge. As Rojec (1997) points out, the impact of the EU accession on FDI in CEECs can be judged if compared to the association agreement which already provides for free trade.

What changes of the direct investment activities in CEECs can be expected due to EU accession? Becoming part of the internal market may boost trade and FDI activities between CEECs and the EU-15. Based on the experience of Portugal and Spain, a general upswing of FDI can be expected already during the accession negotiations and also when the accession takes place. But a real surge of FDI, like in the case of the Iberian countries, cannot be expected due to already advanced trade and investment liberalization in most CEEC candidates.

Factors attracting FDI will generally change for the better, like the level of investment risk, the size of freely accessible market and the size of the host country local market. The investment risk of CEEC-5 will certainly be lower than of left-out CEECs due to higher political and economic stability. Lower risk is a benefit for investors and host countries alike in the form of lower risk premium and higher potential FDI. The size of freely attainable market will grow for certain products. Although most of the trade with manufacturing products were already liberalized by the Europe agreements, the absence of border control can further reduce costs. Domestic demand is expected to increase in the accession countries more rapidly than in the present EU member states. Although FDI supports the catching up of CEECs in terms of economic development and wage levels, the gap will remain there for a considerable time and attract labor intensive production to CEECs.

It can be expected that a reorganization of multinational corporate networks will take place when CEECs become part of the internal market. There will be more intensive production integration of the new members and also some rationalization of locations. Domestic market oriented affiliates in CEECs may become more internationalized, others may be closed down. Some of the activities of multinational enterprises may become more concentrated in one of the other new EU-member states and move out from less favorable locations.

It can be concluded that further FDI, EU accession and catching-up reinforce each other. The benefit of the three processes to the present EU members is both an enhanced political and economic stability in Europe and higher dynamism and competitiveness. These aims can best be achieved if CEECs can catch up fast with the EU in terms of economic growth as well as legal and institutional harmonization. EU membership is therefore to be considered as a vehicle and not the final result of the catching-up process.

8. The Role of Policy and the Prospects of FDI in CEECs

CEEC-4 have not applied an active FDI policy during transformation. Hungary was the last to unify incentives for domestic and foreign investors in 1995. Most of the incentives both protective and stimulating policies discriminating foreign investment enterprises against domestic enterprises violate the principles of the EU single-market rules and the competition

policy in particular and thus might be an obstacle to closer relationships with the EU. Independently whether a CEEC becomes a member of EU or not, the freedom both to protect domestic industries and to subsidize inward FDI is limited under international competition rules. EU competition policy is also shaping the behavior of non-members in as far as their trade with the EU is concerned. Further effects can be expected from the envisaged MAI (Multilateral Agreement on Investment) of OECD which most likely will further reduce national policy discretion in this field. However, despite the changing policy framework, no resolution of the debate is likely in the near future.

In Austria a cluster-oriented location policy has been frequently proposed, partly implemented, in order to support complementary investment, which may then accumulate know-how and networks between suppliers and customers and competition between cluster-firms. Among the various general location policies, the optimization of the national innovation system has priority. This should ensure not only technology transfer and technology creation in foreign subsidiaries but also attract additional investment. A steady process of upgrading human capital is also seen as a necessary condition to ensure inward FDI. Other methods include business parks, regional initiatives. Future subsidies by the EU may complement local policies. Hungary has a recent program supporting domestic subcontracting to FIEs and to attract green-field FDI with industrial parks. The duty-free-zone status of exporting FIEs remains one of the major factors of attraction (Hunya 1996, Éltető 1998).

Assembling plants with mass-production of specific products via comparatively low production-cost and high productivity tend to be subject to a substantial pressure to relocate if cost increase. CEECs benefit from this type of relocation for the time being and EU countries, notably Austria, are the losers. The future of a country as a business location should therefore be based on the immobile, at the same time high value-added, elements of the value-added chain of large MNEs. Austria is moving in this direction and can generally stand the pressure of international competition for inward investment, paralleled with further reductions of the share of production cost in total cost.

CEEC-4, on the other hand can utilize their cost gap for attracting FDI for quite some time, as Austria did in the 1960s, 1970s. But they must be always aware of the increasing competition when their labor costs rise. CEEC-4 manufacturing industries are for the time being increasingly competitive by becoming integrated into multinational production networks via FDI. These gains are due to diminish in the future and the specific location factors become more important. FDI helps to change industrial structures in conformity with European trends, but for the future, the development path of subsidiaries in international productive networks is more important.

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Table 1. Foreign direct investment in CEECs: Inflow 1994-97 and stock end-1997

	Inflow USD mn				1997	Inflow 1997		Stock 1997	
	1994	1995	1996	1997		as % of fixed capital formation ¹⁾	USD mn	as % of GDP ¹⁾	
Czech Republic	869	2562	1428	1300	8.1	6763	13.0		
Hungary	1319	4571	2040	2107	21.5	17529	39.3		
Poland	1493 ²⁾	2511 ²⁾	4000 ²⁾	5678 ²⁾	19.7 ²⁾	15305 ³⁾	11.5		
Slovakia	185	181	667	311	4.0	1517	9.0		
Slovenia	377	414	190	600 ⁴⁾	14.3	2400	13.7		
Bulgaria	214	163	234	510	51.0	1252	12.5		
Romania ⁵⁾	568	313	609	1210	18.0	3600	9.1		
CEEC-7	5025	10714	9168	11726	.	47114	.		

Remarks: 1997 inflows estimated for Slovakia and Slovenia. Flows do not add up to stocks in USD.

Notes: 1) Preliminary. – 2) Projects with more than USD 1 mn invested capital. Since 1996 including re-invested profits. 1997 including small ventures: USD 6600 mn. – 3) 1997 stock including small ventures and adjusted to international methodology; stock measured by local method USD 20.7 bn. – 4) Estimated. – 5) Inflow based on FDI registration, stocks estimated. For a detailed description of methodology see: G. Hunya and J. Stankovsky, WIIW-WIFO Database on FDI, December 1997.

Source: WIIW database on FDI

Table 2. FDI stock by major investing countries as of December 1997, shares in%

	Czech Republic	Hungary ¹⁾	Slovak Republic ²⁾	Slovenia ³⁾
Germany	27.9	23.8	22.6	14.1
Austria	7.3	14.5	20.9	34.3
USA	13.2	17.1	6.3	1.3
Netherlands	13.8	9.5	9.9	2.0
Switzerland	10.6	2.3	1.3	3.5
France	7.8	7.8	6.8	7.5
Italy	2.1	3.8	1.3	7.4
United Kingdom	.	5.8	11.2	4.7
Other countries	17.3	15.4	19.8	25.2
EU	76.2	71.2	74.9	76.7
Total	100.0	100.0	100.0	100.0
Total, USD mn	6763	8778	1517	1934

1)

2) 1996, data based on sample survey. 1) Data of National bank including banking sector. 3) 1996.

Source: WIIW database on FDI

Table 3. Foreign direct investment in CEEC-7 by industries (NACE), FDI stock as of December 1996, shares in %

Code		Czech Republic	Hungary	Slovak Republic	Slovenia
NACE					
A,B	Agriculture, forestry, fishing	.	1.2	.	.
C	Mining and quarrying	.	1.2	.	.
D	Manufacturing	37.4	39.6	47.5	35.2
E	Electricity, gas, water supply	.	14.2	.	.
F	Construction	8.3	3.7	3.1	.
G	Trade, repair of motor vehicles, etc.	8.1	11.9	18.0	9.2
H	Hotels and restaurants	.	2.5	1.4	.
I	Transport, storage, communications	22.1	8.8	2.1	6.6
J	Finance, insurance	.	8.9	25.5	11.3
K	Real estate, renting & business act.	.	7.3	1.9	8.3
L	Public administr., defense, social sec.	.	.	.	.
N	Health and social work	.	0.1	.	.
O	Other community, social & pers. activ.	.	0.6	0.5	.
	Other not classified activities	24.1	.	.	29.4
	Total	100.0	100.0	100.0	100.0
	Total, USD mn	7060.9	9787.2	1326.2	1642.8

Table 4. Number of companies, share of FIEs in the total, per cent

	n number of FIEs					
	1993	1994	1995	1996	96/94	1996
Czech Republic	5.2	6.5	9.4	12.5	191.7	284
Hungary	24.0	23.4	21.4	21.6	92.4	4312
Slovak Republic	8.2	12.3	14.7	15.5	126.4	272
Slovenia	.	4.9	4.1	4.9	98.8	286

Table 5. Nominal capital per company, FIEs per DE,	1993	1994	1995	1996	96/94
Czech Republic ¹⁾	.	2 049	192.0	190.4	92.9
Hungary	259.8	5 064	639.4	748.5	147.8
Slovak Republic ²⁾	.	.	120.1	131.1	.
Slovenia	.	2 184	294.3	330.3	151.2

1) Own capital. - 2) Equity capital.

Table 6. Nominal capital per employee, FIEs per

	1993	1994	1995	1996	96/94
Czech Republic ¹⁾	.	186.7	189.3	181.2	97.0
Hungary	1 773	261.1	294.9	366.4	140.3
Slovak Republic ²⁾	.	.	154.5	167.1	.
Slovenia	.	134.3	134.5	150.6	112.2

1) Own capital. - 2) Equity capital.

Table 7. Assets per employee, FIEs per DEs

	1993	1994	1995	1996	96/94
Czech Republic	.	149.8	163.9	160.2	107.0
Hungary
Slovak Republic	.	.	125.8	145.7	.
Slovenia	.	170.8	152.2	155.1	90.8

Table 8. Share of foreign investment enterprises (FIEs) in main indicators of manufacturing companies, 1996, per cent

	Equity capital	Employment	Investments	Sales	Export sales
Czech R.	21.5 ¹	13.1	33.5	22.6	.
Hungary	67.4 ²	36.1	82.5	61.4	77.5
Slovak R.	19.4	13.0	24.7	21.6	.
Slovenia	15.6	10.1	20.3	19.6	25.8
Austria ³	24.8	32.9	.	45	.

1) Own capital; - 2) Nominal capital in cash; - 3) 1995

Table 9. Nominal capital, Share of FIEs, per cent

	1993	1994	1995	1996	96/94
Czech Republic ¹⁾	.	12.5	16.7	21.5	171.0
Hungary	45.1	60.8	63.5	67.4	110.9
Slovak Republic ²⁾	.	.	17.2	19.4	.
Slovenia	.	10.2	11.2	14.5	142.2

1) Own capital. - 2) Equity capital.

Table 10. Value added, Share of FIEs, per cent

	1993	1994	1995	1996	96/94
Czech Republic	8.6	9.2	16.1	21.7	236.6
Hungary	.	.	.	.	.
Slovak Republic	10.1	13.0	18.6	19.1	146.7
Slovenia	.	12.1	12.5	13.4	110.2

Table 11. Total assets, Share of FIEs per cent

	1993	1994	1995	1996	96/94
Czech Republic	.	10.3	14.8	19.5	188.5
Hungary	.	.	.	.	.
Slovak Republic	8.9	9.4	13.6	16.0	170.0
Slovenia	.	12.6	12.5	14.8	117.7

Table 12. Number of employees, Share of FIEs per cent

	1993	1994	1995	1996	96/94
Czech Republic	5.9	7.1	9.6	13.1	183.6
Hungary	31.7	37.2	37.2	36.1	96.9
Slovak Republic	8.0	9.3	11.8	13.0	139.8
Slovenia	.	7.8	8.5	10.1	129.7

Note: Hungary – change of methodology in 1995, 1996

Table 13. Sales, share of FIEs, per cent

	1993	1994	1995	1996	96/94
Czech Republic	11.5	12.5	16.8	22.6	180.5
Hungary	41.3	55.4	56.1	61.4	110.9
Slovak Republic ¹⁾	11.1	13.6	19.6	21.6	159.1
Slovenia	.	16.9	17.6	19.6	116.3

1) Output.

Table 14. Export sales, share of FIEs, per cent

	1993	1994	1995	1996	96/94
Czech Republic	14.9	15.9	.	.	.
Hungary	52.2	65.5	68.3	73.9	112.8
Slovak Republic	.	.	.	.	.
Slovenia (exports)	.	21.1	23.2	25.8	122.4

Table 15. Investment outlays, share of FIEs, per cent

	1993	1994	1995	1996	96/94
Czech Republic	25.3	26.9	27.4	33.5	124.8
Hungary	58.9	79.0	79.9	82.5	104.5
Slovak Republic	24.4	34.3	29.3	24.7	84.3
Slovenia	.	.	14.0	20.3	.

Table 16. Sales per employee, FIEs per DEs, per cent					
	1993	1994	1995	1996	96/94
Czech Republic	209.1	186.3	190.5	193.7	104.0
Hungary	151.4	209.0	216.4	281.8	134.8
Slovak Republic	145.2	153.5	181.6	184.9	120.5
Slovenia	.	240.9	228.0	217.8	90.4
Table 17. Exports per employee, FIEs per DEs, per cent					
	1993	1994	1995	1996	96/94
Czech Republic	280.2	246.4	.	.	.
Hungary	235.1	319.7	364.9	500.9	156.7
Slovak Republic	.	.	.	.	.
Slovenia	.	317.3	323.1	310.3	97.8
Table 18. Exports per sales, FIEs per DEs, per cent					
	1993	1994	1995	1996	96/94
Czech Republic	134.0	132.3	.	.	.
Hungary	155.3	152.9	168.6	177.8	116.2
Slovak Republic	.	.	.	.	.
Slovenia	.	131.7	141.7	142.5	108.2
Table 19. Investment outlays per assets, FIEs per DEs, percent					
	1993	1994	1995	1996	96/94
Czech Republic	.	318.9	218.2	208.6	65.4
Hungary	.	.	.	.	.
Slovak Republic	328.1	501.3	263.8	171.7	34.3
Slovenia	.	.	114.4	146.2	.
Table 20. Investment outlays per sales, FIEs per DEs, per cent					
	1993	1994	1995	1996	96/94
Czech Republic	260.3	256.4	37.8	172.5	67.3
Hungary	204.0	302.6	311.6	297.4	98.3
Slovak Republic	256.9	331.8	169.8	118.8	35.8
Slovenia	.	.	76.4	146.2	.

Table 21. Profits, share of FIEs, per cent

	1993	1994	1995	1996	96/94
Czech Republic	4.6	0.2	26.9	92.5	57282.0
Hungary	.	.	63.3	89.7	.
Slovak Republic	45.5	1.2	242.1	.	.
Slovenia	.	17.8	21.0	21.9	123.6

Table 22. Share of FIEs in manufacturing production and employment, OECD countries in about 1990, CEEC-4 in 1996, Austria in 1995, per cent

	Production	Employment	Productivity
HUNGARY	61.4	36.1	70.1
Ireland	55.1	44.2	24.7
AUSTRIA	51.4	37.1	38.5
Canada	49.0	38.0	28.9
Australia	32.0	23.8	34.5
France	26.9	22.1	21.7
United Kingdom	25.5	17.2	48.3
CZECHR.	22.6	13.1	72.5
Italy	22.3	17.2	29.7
SLOVAKIA	21.6	13.0	66.2
SLOVENIA	19.6	10.1	94.1
Sweden	18.0	16.9	6.5
Denmark	14.2	12.4	14.5
Germany	13.7	7.3	91.7
Finland	6.7	6.2	8.1
Turkey	5.9	4.4	34.1
Source: OECD (1996), WIIW			

Table 23. Industries with significant above-average shares of FIEs in sales, 1994, 1996, per cent

Hungary			Czech Republic		
1994	1996		1994	1996	
99.6	99.2	Coke and petroleum	60.0	66.9	Motor vehicles
99.5	98.7	Tobacco	37.2	43.8	Rubber and plastic
78.4	82.7	Electrical machinery	25.9	29.0	Publishing, printing
72.0	84.8	Motor vehicles	23.7	45.6	Non-metallic minerals
70.0	71.8	Other transport equipment	13.2	32.0	Electrical machinery
61.0	79.0	Radio and TV sets	(4.8)	35.9	Radio and TV sets
55.4	61.4	Manufacturing total	12.5	22.6	Manufacturing total
Slovak Republic (output)			Slovenia		
1994	1996		1994	1996	
39.4	61.4	Transport equipment	100.0	100.0	Tobacco
35.5	50.0	Electrical machinery	64.5	82.3	Transport equipment
24.2	47.8	Radio, TV sets	42.9	35.4	Paper
20.6	25.6	Paper, printing, publishing	.	40.4	Radio, TV sets
15.7	26.4	Textiles	.	21.3	Machinery n.e.c.
12.8	21.6	Manufacturing total	16.9	19.6	Manufacturing total

Austria

1995

84.6 Electrical machinery

64.7 Transport equipment

51.4 Manufacturing total

Source: WIIW database on foreign investment enterprises, relying on data supplied by national statistical offices.

The Trade with Industrial Goods Between Bulgaria and the Countries from the European Union: Tendencies of the Bulgarian Industrial Specialization in the Transition to Market Economy

Vesselin Mintchev

Introduction

In the transition of the Central and East European (CEE) countries to market economy Bulgaria takes a special place. Few months after the collapse of CMEA Bulgaria was compelled to declare a moratorium on external debt payments (March 1990). The loss of access to international financial markets and the blockage of foreign investments are among the most unfavorable effects of the Moratorium on the external debt. When an agreement was reached on the debt to the banks from London Club (June 1994) the country had not yet started the structural reforms that it badly needed.

Foreign trade liberalization in Bulgaria was attended by the 'crisis of transition' (Kornai, 1995), similar to the one in the former USSR countries. The negative consequences of the 'opening shock' were further 'alleviated' by the depreciation of the Bulgarian lev in 1994 and 1996 - 1997.

The purpose of the present paper is to outline the contours of the reorientation of the trade with industrial goods between Bulgaria and the European Union during the first five years of the transition - 1990 - 1995, and to introduce the main conventional indicators of foreign trade specialization for the Bulgarian industry¹.

The article is divided into three chapters:

The first chapter presents a general overview of the macroeconomic framework of the transition, as well as of the condition of the external sector of the Bulgarian economy.

¹ This survey is part of the ACE-PHARE project Berko, L., Enchevretment industriel et gravitation commerciale, (P95-2030-R).

The second chapter analyses the structure and dynamics of the trade with industrial goods between Bulgaria and the European Union during the same period, as for that purpose are used the foreign trade statistics of the OECD, respectively the Standard International Trade Classification (S.I.T.C.), third revision.

The third chapter presents an estimation of the foreign trade specialization of Bulgarian industry, based on well-known conventional indicators - the indicators of the relative structure of export and import, of the position (share) on the European market, of comparative advantages, as well as of intraindustry trade.

The analysis is based on the traditional theory of foreign trade, according to which trade is determined by factor endowments of the partner countries; as well as on modern approaches, according to which the trade with industrial goods among industrial countries is more and more dependent on factors, other than endowments of certain goods. (Dobrinski R., 1995; Landesman M., 1995).

As it was already pointed in the empirical analysis, the OECD foreign trade statistics are used - S.I.T.C., 3-rd revision, 3-digit level of desegregation. (The data is from ACE-PHARE P95-2030-R)

1. Macroeconomic Framework of the Systemic Changes in Bulgaria

1.1 Macroeconomical Framework and the Implementation of the Currency Board Arrangement

The 'crisis of transition' (Kornai, 1995) was and still is extremely serious in Bulgaria. The main macroeconomic indicators have negative trajectories for almost the whole period after the raise of the 'Safety-curtain'. The comparatively good results in 1994 -1995 after 're-echeloning' of the external debt in 1994 were followed by a crisis at the end of 1996 - beginning of 1997. The country fell into a recession, deeper than that in 1991 - the year of the beginning of the reforms (EBRD, 1997). According to estimations of the European Bank for Reconstruction and Development, in 1996 the Gross domestic product (GDP) and the Industrial production decreased respectively by 10.9% and 7.9%. The budget deficit whose monetisation remained high because of the Central Bank's refinancing of commercial banks, varies between 6% and 13% of GDP in the recent years (See Table 1).

The degradation of the economic situation in 1996 forced the implementation of the Currency Board on 1 July 1997. The Currency Board was regarded as the only alternative for improving financial discipline in the country.

If we examine the causes which led to that unfavorable economic situation in Bulgaria, we should mention the state of dependence of Bulgarian economy on ex - CMEA and former-USSR markets, as well as the instability in the Balkan region. In 1991 Bulgaria lost more than a half of its markets. The succeeding years revealed the disability of Bulgarian enterprises to compensate that loss. In 1994 and 1995 the financing of growth through export, based on the prices of electricity and fuels lower than the world prices, aggravated the inherited structural problems of the Bulgarian economy (UN - ECE, 1997, pp. 75-84)

The non-compensated loss of markets and the problems of external indebtedness placed the country in an unfavorable position in comparison not only with the Central European countries and Romania, but also in comparison with some of the former USSR republics.

1.2 External Sector of the Bulgarian Economy

Despite the unfavorable conjuncture in the recent years, Bulgarian economy has kept its open nature. In 1995 the ratio between the foreign trade turnover and the GDP was 80%. The country reoriented its trade to the region of OECD - 50% of the Bulgarian export and almost 47% of the import are with the OECD countries (See Table 2). On the other hand, the share of Central and Eastern Europe (CEE), and especially of Russia in the Bulgarian foreign trade has remained significant. For the first three quarters of 1996 the main trade partners of Bulgaria are Russia (18,7% of the foreign trade turnover), Germany (10,8%), Italy (8,8%), Greece (6%), while, for instance, France has a share of only 3% (Tailbot P., 1997).

The analysis of the trade with industrial goods and the foreign trade specialization of Bulgarian industry in the next two chapters covers the situation before the crisis at the end of 1996. The presentation does not contain estimations of the so-called second 'adjustment under disaster conditions' (Chavigny R., 1996) after the crisis, succeeding the collapse of CMEA; respectively, after the termination of the Agreement on Prices of Fuels, or estimations of the effect of the coming into force of the Agreement on Association of Bulgaria to the European Community.

2. Restructuring of the Trade with Industrial Goods between Bulgaria and the EU Countries.

The restructuring of the trade with industrial goods between Bulgaria and the EU countries depends,

- first, on the foreign trade liberalization accompanying the systemic changes in the CEE countries, including Bulgaria;
- second, on the extremely deep recession of the transition in the country;
- third, on the recession in the European Community in 1993;
- and, lastly, on the coming into force of the Agreement on Association on 1February, 1995.

Germany and Italy are among Bulgaria's prior foreign trade partners. Bulgaria's trade with industrial goods with France and Austria takes a more moderate place (Tables 3 and 4).

2.1 General Condition

The development of the trade with industrial goods with the European Community (12 countries - till Austria, Sweden and Finland joined the union) is dynamic. For the 1990-1995 period the export of industrial goods from Bulgaria to the European Community increased by 318,1%. The growth of the import of industrial goods however is 108,7%. The 'gap' in the dynamics of import - export leads to decrease in the deficit of the

industrial turnover between Bulgaria and the Community. From USD 518 million in 1990 the deficit diminished to USD 162 million in 1995. This can be ascribed to the specificity of the economic situation in Bulgaria - the adjustment of the external sector of the Bulgarian economy is based on a reduction of the import from the Community, because of the gravity of the crisis in the country. The crisis concerning the external debt service forces Bulgaria to revive its export in order to balance its balance of payments.

In 1995, for the first time in the examined period, Bulgarian export of industrial goods to Italy is greater than that to Germany. From the point of view of the Bulgarian demand, Germany does not give up its place of first exporter to Bulgaria – nearly half of the Bulgarian industrial import from the European Community is from Germany. Italy holds second position. Bulgaria has a significant deficit in its industrial turnover with Germany (USD -423 million), while with Italy it has a surplus of about USD 50 million (Tables 3, 4, and 5).

The data in Table 5 confirms the positive trends in the development of ‘Manufactured goods, classified chiefly by material’ - 06 and ‘Miscellaneous manufactured articles’ (08). In the same time the country registers a significant deficit in its trade with ‘Machinery and transport equipment’ (07).

Bulgaria can be expected to manage to keep a balance in its trade with industrial goods with low and average rates of value added. But these are the goods which form the sector of the ‘sensitive’, respectively - the ‘protected’ goods. As far as trade with industrial goods of higher rate of value added is concerned, it is obvious that the country will continue registering deficits with most of its West European partners.

Based on the evidence of the trade with industrial goods between Bulgaria and Germany, and to less extent – between Bulgaria and Austria, one could outline the effects of the foreign trade liberalization between countries at different levels of development. The data in Table 5 reveals the significant increase of the existing deficits, as well as the peculiar Bulgarian ‘expansion’ in the ‘sensitive’ sectors (clothing and metallurgy). In fact, the industrial turnover between Bulgaria on the one hand, and Germany and Austria on the other, as well as between Bulgaria and the rest of its West European partners is based, as we shall see in the last chapter of this presentation, mostly on the existing comparative advantages of each of the partners. Therefore, the trade between them is interindustry. The trade with very few commodity groups is of intraindustry type (For the pattern of trade between France and CEE see Colin-Sedillot B., 1994).

The more detailed analysis of the bilateral trade with industrial goods between Bulgaria and the European Community as a whole (12 member-countries), as well as between Bulgaria and selected West European partners of its, is of great interest – up to the level of 2- (sub-branch) and 3- (group of products) digit level of desegregation according to the S.I.T.C. for the period 1990-1995.

As a reference point in the analysis we shall use the ten (at 2 digit level of desegregation) and the 20 (at three digit level) most exported and respectively most imported commodity groups in the Bulgarian industrial turnover with the countries from EC, and separately with Germany, Italy, France and Austria. We shall examine consecutively the *structure*

dynamics and *degree of penetration*² of the most important commodity groups in the Bulgarian turnover with the Community and with the separate partner countries, and we shall use the following methodology:

The *structure* of the turnover by groups of commodities for certain years and the dynamics of that structure are calculated in percent for each year: $c_{ijk}(t) = \frac{X_{ijk}(t)}{X_{ij}(t)}$; and the dynamics – as the difference between: $c_{ijk}(t) - c_{ijk}(t-1)$.

The *dynamics* of bilateral turnover by commodity groups is calculated in percent for each year: $\frac{X_{ijk}(t)}{X_{ijk}(t-1)} - 1$ - for the export, $\frac{M_{ijk}(t)}{M_{ijk}(t-1)} - 1$ - for the import.

The *degree of penetration* shows the share of the import of country j (a member of the EC) from country i (from CEE) of the commodity k into the total import of that commodity into the country j. It is calculated on a yearly basis: $p_{ijk}(t) = \frac{X_{ijk}(t)}{X_{jk}(t)}$, and respectively, its dynamics can be expressed by the difference: $p_{ijk}(t) - p_{ijk}(t-1)$.

2.2. Structure and Dynamics of the Trade with Industrial Goods between Bulgaria and the EC-12, Germany, Italy, France and Austria

2.2.1 Structure (Concentration of products predominating in the export and in the import)

A) Bulgaria - EC-12

The concentration of the Bulgarian export of industrial goods for the countries of the EC is higher than that of the import. In 1991 the top ten groups in the Bulgarian export (under two-digit level of desegregation according to S.I.T.C. – that is, 10 out of 36 commodity groups) form as much as 80,4% of the export (63,84% for the top five groups). At the same time the top ten commodity groups in the import reached the share of 65,38% in the total import of industrial goods from the EC (48,17% for the first five groups) (Table 6). The level of concentration is still significant for the top twenty commodity groups in the export, respectively in the import - 3-digit level of desegregation after S.T.I.C., that is, 20 out of 324 commodity groups. The top 20 in the export form 65,72% of the total export; and the top 20 groups in the import amount to 34,39% of the total import. As far as the top five, respectively, the top 10 groups in the export are concerned (3-digit level of desegregation), their shares in the total export are respectively 45,9% and 56,11%. While the top 5 and respectively the top 10 in the import form 19,55% and 26,23% of the total import (Table 7). The fact that the most exported and the most imported commodity groups are very rarely identical, both under two-digit level of desegregation and under 3-digit level of desegregation, confirms the existence of ‘*interindustry complementance*’ between Bulgaria and the EC countries.

² See the papers of M. Andreff and M. Lissowska in ACE-PHARE project - P95-2030-R.

B) Bulgaria – Germany, Italy, France and Austria

The analysis of the bilateral trade with industrial goods between Bulgaria and Germany, Italy, France and Austria expands the picture presented above.

The concentration of the Bulgarian industrial export to Germany and Italy is higher than that of the export to the 12 countries of the EC. The relative share of the top ten groups of commodities (2-digit level of desegregation) in the export to Germany and Italy is respectively 83,4% (70,6% for the top five sections) and 84,7% (71,4% for the top five sections). The share of the top ten groups in Bulgaria's industrial export to France amounts to 82,41% (63,1% - for the top five groups) and 78,34% of the export to Austria.

On the other hand, the level of concentration of Bulgarian import is also high: the top 10 groups in the import (2-digit level of desegregation) from Germany, Italy, and France form respectively 75,48%, 73,01% and 70,69 (respectively 60,7%; 51,5% and 43,43% for the top 5 groups) which is by about 10% less than the relative share of the top 10 groups in the Bulgarian industrial export to those countries. The same applies to the turnover between Bulgaria and Austria – the top 10 of the imported commodities in Bulgaria from Austria take 65,54% of the Bulgarian import from that country (See tables 9, 11, 13, 15).

This tendency is further confirmed by the analysis of the relative share of both the top 20 and the top 10 commodity groups in the export and import under 3-digit level of desegregation. *The concentration of export is significantly higher than that of import.*

So, the respective indices for Germany are 67,88% for the top 20 commodity groups in the export against 35,44% for the top 20 commodity groups in the import (64,86% - 33,41% for the top 10 in the export and the import). For Italy the ratio between the top 20 commodity groups in the export and the top 20 in the import is as follows - 62,25% / 32,07% (51,84% / 25,43% - for the top ten commodities); for France - 67,80% / 35,44% - for the top 20 commodity groups in the export and import and respectively, 61,98% / 28,6% for the top ten groups; and for Austria - 48,44% / 32,16% for the top 20, and 41,85% / 22,2% for the top 10 commodity groups (See Tables 10, 12, 14, and 16).

The data in tables 9-16 also indicates that the concentration of the export and import of industrial goods between Bulgaria on the one hand, and Germany and France on the other, is more imbalanced compared with the trade of Bulgaria with the other two countries from the Community – Italy and Austria. The discrepancy in the concentration of the most exported and the most imported groups of commodities is lowest in the industrial turnover between Bulgaria and Austria.

As a rule, the most exported and the most imported commodity groups do not coincide, which comes to show the existence of *interindustry complementance* between the economy of Bulgaria and that of its West European partners. In the trade with Italy, 3 of the top 10 commodity groups in the export and import coincide - 3-digit level of desegregation. These are:

841 -

845 – Underwear, accessories...

512 – Alcohol, phenol, alcohol-phenol.

In the industrial turnover between Bulgaria and France the commodity groups which coincide are: 778 – ‘Other machinery and electrical apparatus’ and 747 - ; in Bulgaria's trade with Austria these are: 781 ‘Automobiles, all kinds of engines’ and also 747; and in the turnover between Bulgaria and Germany - only 778 ‘Other machinery and electrical apparatus’.

On the other hand, *the homogeneity of the industrial turnover* of Bulgaria with its examined West-European partners is impressive. Three of the top ten commodity groups (3-digit level of desegregation) - 673, 841 and 845 are identical in the export to each of the four West-European countries. As for the import, 2 of the top 10 commodity groups in the import, 741 and 781, coincide for each of the four countries. Moreover, 6 of the top 10 commodity groups in Bulgaria's import from Germany and France, as well as 4 of the top 10 commodity groups imported from Germany and Austria, coincide.

2.2.2 Dynamics

The dynamics of the industrial goods, predominating in the export and import of Bulgaria to and from the countries of the EC reflects the degree of *restructuring and adjustment* of the country's trade with industrial goods.

A) Bulgaria – EU-12

The dynamics of the top commodity groups in the export and import is generally higher than the average dynamics of the trade with industrial goods between Bulgaria and the West-European countries. Nevertheless, the data in Tables 6-7 shows that the dynamics of the first two commodity groups (2 -digit level of desegregation), ‘Iron and steel’ - 67 and ‘Articles of apparel and clothing’ - 84; as well as of certain groups that are among the top 10 under 3-digit level of desegregation, such as: ‘Profiles – iron and steel’- 673; ‘Outer male garments’ - 842; 841; 845; ‘Mechanic equipment’ - 744, is lower than the average.

The foreign trade liberalization in Bulgaria is accompanied by reorientation of the country's import towards consumer goods, such as ‘Household appliances’ - 775; ‘Automobiles’ – 783, etc.

The *degree of penetration* indicator outlines the influence of a country-exporter of a certain product on the market of the importing country. The analysis of the penetration of Bulgarian industrial goods into the markets of the EC under 3-digit level of desegregation, as well as into the markets of the countries from the EC as a reference zone, shows a significant presence of the Bulgarian non-ferrous metallurgy at these markets. For example, Bulgarian lead (‘Lead’ - 685) takes 9% of the market of the Community. Bulgaria is probably the only East European country-exporter of fertilizers (‘Fertilizers manufactured’ - 562) - 4,14% of the market of the EC. This is one of the possible explanations of the fact that the biggest foreign investors in Bulgaria choose exactly these branches – base chemistry (Solvay – Sodi, Devnia); non-ferrous metallurgy (Union miniere), etc. On the other hand, the *degree of penetration* gives an idea of the size of the economy; by this indicator the CEE countries are far behind the new industrial countries.

The characteristics of the most exported commodity groups from Bulgaria to the countries of the Community, based on OECD criteria:

- level of technology;
- orientation;
- level of wages and employment (OCDE, 1993)

show the presence of goods, produced with low and average technologies - 673, 682, 562, 842, 841, 845, 523, 512, 685; natural resource-consuming - 673, 682, 685; labor-consuming - 842, 841, 845; and goods, the production of which engages non-qualified workers - 673, 682, 841, 842, 845, 744, 685 (Table 8). In this sense, foreign investors' interest in the country can be maintained almost only by the low wages and the so called factor endowment.

Bulgaria will probably be able to keep balanced its trade balance of industrial goods with low and average rate of value added. These goods, however, form the sector of the 'sensitive', respectively 'protected' goods, which questions the country's possibility to take advantage of the asymmetry in the Agreement on Association. As for the trade with industrial goods with high rate of value added, Bulgaria will obviously continue accumulating deficits with most of its West European partners.

B) Bulgaria – Germany

The export of two of the top five commodity groups (2-digit level of desegregation), namely the first and the third one, increases with slower rates compared with the total Bulgarian export of industrial goods to Germany, as well as to EC-12 as a whole. These groups are 'Articles of apparel and clothing' – 84 and 'Iron and steel'– 67.

At the same time two other commodity groups, 'Electrical machinery and parts thereof' - 77 and 'Non-ferrous metals' - 68 register an increase, bigger than the average for the export to Germany and the Community.

The analysis of the dynamics of the most exported commodity groups under a 3-digit level of desegregation shows that the export of the top 3 groups - 841, 842 and 845 (these are different types of clothing, which generally form 1/3 of Bulgaria's industrial export to Germany) increases with lower rates than the growth of the total export of industrial goods from Bulgaria to Germany. The rates of export of 'Profiles of steel and iron' – 673 are constant during the examined period.

On the other hand, the export of commodities, in which Bulgaria specialized under the agreements of the former CMEA, such as 778 - 'Other machinery and electrical apparatus', 773 - "Equipment for transportation and allocation of electricity"; 774 – 'Electrical medical apparatus and apparatus for radiology' increases significantly which is typical of the trade with these commodities for most of the CEE countries (Tables 9, 10).

The *degree of penetration* of the top 5 commodity groups in Bulgarian export (3-digit level of desegregation) to Germany (zone of reference – the European Community) is between 1 and 4%. These are: clothing - 841 and 842; non ferrous metallurgy - copper

(682) and lead (685), as the latter is the 21-st commodity group, but has a share of 1,2% at the German market (See Table 9 and 10).

The dynamics of the import of industrial goods from Germany differs considerably from that of the export. This is also typical of the trade between Germany and the rest of the CEE countries, and can be used as an indicator of the gravity of the 'crisis of transition' in the region.

The import of two of the top 5 commodity groups in import (2-digit level of desegregation) increases very modestly; these are: 74 – 'General industrial machinery and equipment and parts, n.e.c.' and 77 – 'Electrical machinery and parts thereof', but the import of 72 – 'Machinery specialized for particular industries' decreases. The import of consumer goods increases: 'Road vehicles' (78); and 'Textile yearn, fabrics, made-up articles' (65).

As for the dynamics of the top 20 commodity groups in the import under 3-digit level of desegregation after S.T.I.C., the import of at least half of them diminishes in the course of the examined period 1990-1995. This, as well as the reorientation of Bulgarian demand towards consumer goods, confirms the extreme gravity of the crisis in the country.

C) Bulgaria - Italy

The commodity groups, most exported to Italy under 2-digit level of desegregation are characterized by considerable export dynamics. These are mostly 'Non ferrous metals' (68) and 'Fertilizers manufactured' (56). The export rates of 'Iron and steel' (67) and 'Footwear' (85) remain unchanged.

The study of the export of the most exported groups of commodities under 3-digit level of desegregation reveals dynamics higher than the average for the base chemistry products: 'Fertilizers manufactured' - 562, and non ferrous metallurgy products – lead (685). In 1995 Bulgarian manufactured fertilizers took 24% of the Italian market (zone of reference – the European Community). In the same year Bulgarian lead took as much as 44% (See Tables 11, 12).

Similar to the trade with Germany, the import of most of the major commodity groups of Bulgaria's demand from Italy (2-digit level of desegregation) has negative dynamics or dynamics under the average for the total import from that country. The biggest decrease of import is in 'Machinery specialized for particular industries' (72), and 'General industrial machinery and equipment and parts, n.e.c.' (74). At the same time the import of 'Household apparatus and appliances' (775) increases significantly. In 1995 this group formed more than 11% of Bulgaria's import from Italy. This fact confirms once again the reorientation of the Bulgarian demand from investment towards consumer goods.

D) Bulgaria – France

The dynamics of the top commodity groups in Bulgaria's export to France (2- and 3-digit level of desegregation) is higher than the average for the Bulgarian export to that country. 'Inorganic chemicals' - 523, as well as 'Fertilizers manufactured' (562) are 'expanding'. In 1995 the latter formed 16,99% of the Bulgarian industrial export to France and took 3,02% of the French market (zone of reference – the European Community).

Bulgarian export is characterized by higher than the average import rates in the following commodity groups: 'Road vehicles' (78); 'Electrical machinery and parts thereof' (77); and 'Textile yearn, fabrics, made-up articles' (65). 'General industrial machinery and equipment and parts, n.e.c.' (74) and 'Essential oils and perfume materials' (55) register dynamics below the average. Generally, mostly all of the top 10 commodity groups of the import from France under 3-digit level of desegregation are 'expanding' at the Bulgarian market. The only exceptions are 'Machinery and apparatus for heating and refrigeration' and Pumps (743), whose dynamics is below the average.

E) Bulgaria – Austria

The fastest increase among the top 10 commodity groups of Bulgaria's export to Austria (2-digit level of desegregation) is of 'Power generating machinery and equipment' (71), 'Machinery specialized for particular industries' (72), and 'Non ferrous metals' (68). As for the export dynamics of the top 10 groups under 3-digit level of desegregation, considerable increase can be registered in the export of clothing - 842, 843, of 'Products of rolled iron, iron and steel' (679); as well as of 'Road vehicles – all types of engines' (781).

Lead registers *the highest degree of penetration* among Bulgarian goods - 4,53% of the Austrian market (zone of reference – the market of the EC); followed by Ladies underwear (843) - 1,73% of the market; Profiles of iron and steel (673) - 0,88%, etc.

As for Bulgaria's industrial import from Austria, the following groups of commodities (which are among the most imported under 2-digit level of desegregation) have dynamics above the average:

- Textile yearn, fabrics, made-up articles, n.e.c., and related products (65);
- Road vehicles (78);
- Telecommunications, sound recording and reproducing apparatus and equipment (76);
- Medical and pharmaceutical products (54);

The products whose import increases significantly under 3-digit level of desegregation are the following:

- Medicines - 542;
- Apparatus and household appliances (775);
- Medical apparatus... (774);

(See Tables 15, 16)

3. Initial Tendencies of Specialization of Bulgaria's Industry at the European Market.

The specialization tendencies of the trade with industrial goods between Bulgaria and the countries from the EC could be revealed by indicators such as:

- I –Relative structure of export - (t);
- II – Relative structure of import - (u);
- III – Position (Share) on the international market - (s);
- IV – Comparative advantages;
- V – The Intra-industry trade indicator.

In this section we shall examine these indicators for the top 10 / 20 groups of commodities of the export and import of industrial goods between Bulgaria and the European Community (12), Germany, Italy, France and Austria. In this case, we shall examine data under 3-digit level of desegregation, and we shall use the West European market as a zone of reference.

3.1. Methodology³

Relative structure of export and import:

These indicators are used by B. Balassa. They complement each other. For each product a comparison is made between its share in the export from (import in) the country *i* to the country *j* and the share of the same product in the total export (import) to the country *j*. The indicators allow us to compare the structures of export and respectively, import, and also to eliminate (to a certain extent) the influence of macroeconomic factors on the trade between two countries. The following two types of indicators are regarded:

$$t_{ijk} = \frac{X_{ijk}}{X_{ij}} \Bigg/ \frac{X_{jk}}{X_j}$$

$$u_{ijk} = \frac{M_{ijk}}{M_{ij}} \Bigg/ \frac{M_{jk}}{M_j}$$

If $t > 1$, the country *i* has a comparative advantage (in the sense that its export is above the average for the chosen group of countries) in the export of the product κ over the countries used as a reference; in the same manner, if $u < 1$, the country *i* has a comparative advantage (that is, the import is below the average of a certain region) in the import of the product κ . The country *i* has a comparative advantage in the trade with product κ , if $t > 1$ and $u < 1$ are held simultaneously (i.e. if the country exports more and imports less than its average); and a comparative disadvantage, if $t < 1$ and $u > 1$ (i.e. it exports less and imports more than its average). These indicators enable us to reveal the ‘anomalies’ in the trade between two countries with regard to the standard for their trade with the world, or with the countries of the EC (in the present study – with regard to EC).

Position (Share) on the international market:

This is an indicator of the international competitiveness of the country *i* for the product κ (G. Lafay). For each product the balance of countries *i* and *j* is used against the total market of the country *j*. The indicator is as follows:

³ See the papers of M. Andreff and M. Lissowska in ACE-PHARE project - P95-2030-R.

$$s_{ijk} = \frac{X_{ijk} - M_{ijk}}{X_j + M_j}$$

The higher the value of the indicator - $s > 0$, the more favorable is the country's i position for the respective product (at the market of the regarded product); the more negative the value of the indicator ($s < 0$), the more unfavorable is the position of the country i for that product.

This indicator has the advantage to be comparative for the different commodity groups. It allows to estimate the size of the deficit (surplus) of the relative country. An obstacle to its use is its dependence on macroeconomic factors, on the structure of the respective economy, on the pattern of foreign trade policy, and also on the size of the respective economy.

Comparative advantages:

This indicator accounts for the difference between the share of a certain product in the total export of a country i to a country j , and its share in the total import of i from j . The following ratio is calculated:

$$\frac{X_{ijk}}{X_{ij}} - \frac{M_{ijk}}{M_{ij}}$$

The higher the value of the indicator, the bigger the comparative advantage of the country i in the trade with country j with the product k .

Intra-industry (intra-product) trade

The first indicator of this type is also proposed by B. Balassa. It expresses the ratio between the absolute value of the balance of trade with product k between the countries i and j , and the value of the total turnover between them. Grubel and Lloyd emphasized on the importance of taking into consideration the respective weights of the products into the trade between the countries i and j . The indicator is of the following kind:

$$1 - \frac{\left| \begin{array}{r} X_{ijk} - M_{ijk} \\ X_{ij} - M_{ij} \end{array} \right|}{\begin{array}{r} X_{ijk} + M_{ijk} \\ X_{ij} + M_{ij} \end{array}}$$

The closer the value of the indicator to 1, the more the pattern of trade is intraindustry. And reversely, the closer the value of the indicator to 0, the bigger the specialization of the country i – it is either a predominant exporter or a predominant importer of the respective product.

Under 2-digit level of desegregation for a value of the indicator $< 0,33$ an *inter-industry trade* is observed; for values of the indicator $> 0,77$ an *intra-industry trade* occurs. Under 3-digit level of desegregation, when the indicator $< 0,10$, we have inter-industry type of trade, and when the relative indicator is greater than 0,90 the trade is of intra-industry type.

3.2 Specialization of Bulgarian Export of Industrial Goods to the Countries of the European Union.

A) Bulgaria – European Community (12)

The ratio between the indicators ‘Relative share of the export’ / ‘Relative share of the import’ for the most exported groups of industrial goods from Bulgaria to the Community is unbalanced. This applies especially to the following groups: 673, 682, 562, and 842. The ratio is more balanced with goods immediately following the top five ones, with the exception of lead – 11-th group (685).

This analysis is complemented by two more indicators – that of comparative advantages and that of intra-industry trade. For the top 10 commodity groups in the export *distinct comparative advantages* can be outlined – the first three commodity groups - 673; 682 and 562, and also the eleventh (Lead- 685); the sixteenth (686) and the seventeenth (672) are an example of inter-industry type of industrial turnover (i.e. the *intra-industry trade* indicator < 10%). The trade only with two of the top 20 groups in the exports, 541 and 773 is characterized as intra-industry, that is the *intra-industry trade* indicators for these groups exceed 90% (Table 17)

B) Bulgaria – Germany

For most of the top 10 commodity groups in the export to Germany the ratio: ‘Relative structure of the export/ ‘relative structure of the import’ is imbalanced. These commodity groups are characterized by distinct comparative advantages in favor of Bulgaria. The top 5 industrial goods in the export, which are - 842; 841; 845; 682 and 673 form the significant ‘segment’ of the inter-industry trade. The trade with commodity groups - 747 (11-th in the series) and 679 (20-th) is of intra-industry type, that is the indicator of intra-industry trade exceeds 90% (Table 18).

C) Bulgaria - Italy

The six most exported groups of industrial goods from Bulgaria to Italy also show a serious imbalance in the ratio between ‘Relative structure of the export’ - ‘Relative structure of the import’. The imbalance lessens after the 13-th group. The top 8 groups have distinctly outlined comparative advantages. The trade with the first three groups in the export - 673, 562, 682; plus the 5-th group - 685; the 6-th - 672 and the 8-th - 523 is of inter-industry type. On the other hand, the trade with group 512 – 9-th in the series, as well as with the 684-th group (17-th in the series) form the intra-industry ‘segment’ of the top 20 commodity groups in the export to Italy.

D) Bulgaria – France

The top seven commodity groups in Bulgarian industrial export to France have imbalanced ‘Relative structure of export’ and ‘of import’. After the eighth group the ratio is comparatively balanced – with the exception of the 16-th (844) and the 19-th (685) group. The comparative advantages of the top seven commodity groups in export can be outlined. The first 5 of them form the ‘sector’ of the inter-industry trade with industrial goods between Bulgaria and France - 562; 673; 841; 523; 845. The turnover of commodity group 778 is of an intra-industry type (See Table 20).

E) Bulgaria – Austria

The top six groups of industrial goods in Bulgaria's export to Austria are characterized by considerable imbalance of 'Relative structure of the export' against the 'Relative structure of the import'. For these commodity groups Bulgaria has distinct comparative advantages. They form the inter-industry 'segment' of the trade with industrial goods between the two countries. These are the following commodity groups: 845; 841; 842; 673; 685; 843. Only the 14-th group - 784 distinguishes, as its *intra-industry trade* indicator exceeds 90% (Table 21).

3.3 Characteristics of Bulgaria's Import of Industrial Goods from the European Union Countries

A) European Community (12) – Bulgaria

The examination of the industrial import of Bulgaria from the countries of the Community shows that the ratio of the indicators 'Relative structure of export' and 'Relative structure of import' for the most imported commodity groups in Bulgaria is more balanced than the ratio of these indicators for the most exported groups of industrial goods. Nevertheless, imbalance is registered for the two most imported groups - 783 and 775. The top three commodity groups in import, as well as the 10-th group - 772; the 17-th (786) and the 18-th form the inter-industry trade. As for the intra-industry 'segment, it comprises the 16-th group - 841, and the 20-th group - 773, whose indicators for intra-industry trade exceed 90% (Table 17).

B) Germany – Bulgaria

With the exception of the most imported goods in Bulgaria from Germany, for almost all of the top 20 commodity groups the ratio between the indicators 'Relative structure of export' - 'Relative structure of import' is balanced. Germany has considerable comparative advantages for the first group - 783. An inter-industry turnover is observed for the top 4 commodity groups in Bulgarian import - 783, 781, 782 and 772; as well as for the 14-th group - 784; and for the 19-th group - 742. The trade with the 11-th group (745) and the 20-th group (513) is of intra-industry type (Table 18).

C) Italy – Bulgaria

For the top five commodity groups of Bulgaria's industrial import from Italy, the ratio between the indicators 'Relative structure of export' and 'Relative structure of import' is imbalanced. In the trade with the two most imported in Bulgaria commodity groups, Italy has distinctly outlined comparative advantages. The trade with most of the commodity groups that predominate in the import is of inter-industry type. Among the commodity groups with an *intra-industry trade* indicator above 90% are 747 (9-th group) and 846 (17-th in the series) (Table 19).

D) France – Bulgaria

The structural imbalance of Bulgaria's industrial import from France is than the ratio between the indicators 'Relative structure of export' and 'of import' for the Bulgarian export of industrial goods to that country. France has distinctly outlined comparative advantages for its top seven goods in the export to Bulgaria. They form the inter-industry

‘segment’ of the Bulgarian–French industrial turnover. Only the trade with the commodity group 778 (8-th in the series) is of intra-industry type (Table 20).

E) Austria – Bulgaria

The Bulgarian import from Austria is characterized by a serious structural imbalance. This applies most to the four most imported goods in Bulgaria - 542; 745; 742; 775; as well as to the goods at the 8-th position - 513; and at the 9-th position - 774. For the first four goods Austria has distinct comparative advantages. The trade with 775 (4-th position) and 782 (7-th position) is of inter-industry type. Only the trade with commodity group 784 (17-th in the series) is of intra-industry type (Table 21).

Conclusion

With regard to the concentration of both the export and the import of industrial goods, the trade between Bulgaria on one hand, and Germany and France on the other, seems to be more imbalanced than the turnover between Bulgaria and the other two countries from the European Community – Italy and Austria. The discrepancy between the concentration of the most exported and the most imported commodities is lowest in the industrial turnover between Bulgaria and Austria.

The Bulgarian industrial export is concentrated (which means that Bulgaria has advantages) in traditional industries – clothing; ferrous and non-ferrous metallurgy; as well as in energy- and capital- intensive industries – such as, for example base chemistry. The import is characterized by weak dynamics, because of the gravity of the crisis of the transition, and by a reorientation from a demand of industrial equipment towards import of consumer goods - household appliances and automobiles, for which domestic producers are not competitive, or which are not produced in the country at all.

The analysis of the ratio between the indicators ‘Relative structure of export’ and ‘Relative structure of import’ reveals Bulgaria's distinctly outlined comparative advantages for the most exported goods; as well as the country's comparative disadvantages in the import. The trade with industrial goods of Bulgaria is based on the country's comparative advantages, respectively comparative disadvantages. It is not of an ‘intra-industry’ type. *This involves huge expenses for adapting of the Bulgarian economy during the transition to market economy* (Dobrinski R., 1995, Colin-Sedillot B., 1994, Lemoime F., 1994). The ‘intra-industry’ trade is concentrated in the second half of the top 20 commodity groups in the turnover, under 3-digit level of desegregation. The dissatisfactory volume of foreign investments in the country is one of the reasons for the still insignificant inter-industry industrial turnover.

This pattern of trade with industrial goods between Bulgaria and the European Community places the country's economy into the ‘periphery’, which is inevitable under liberalization of the trade between partners at different levels of development. The analysis proves that Bulgaria specializes in low- or average technology productions and non-qualified labor force, such as clothing and metallurgy. At the same time the import from West Europe includes average- and high technology industries, such as automobile production, household appliances and telecommunications.

Bulgaria will most probably manage to keep the equilibrium in its trade balance as far as industrial goods with low and average rate of value added are concerned. However they form the sector of the 'sensitive', respectively, the 'protected' commodity groups, which questions the country's possibility to avail itself of the asymmetry in the Agreement on the Association of Bulgaria to the European Community, which is in force since 1 February, 1995. On the other hand, Bulgaria will continue registering serious deficits in the trade with most of its West European partners with industrial goods with high rates of value added.

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Enclosure

Table 1. Main macroeconomic indicators for Bulgaria

	1990	1991	1992	1993	1994	1995	1996 (estimation)	1997 (projection)
GDP,%	-9.1	-11.7	-7.3	-2.4	1.8	2.6	-10.9	-7
Industrial Production, %	-16.0	-27.8	-15.0	-11.8	7.8	8.6	-7.9	na
Consumer price index, % (at the end of year)	72.5	338.9	79.4	63.9	121.9	32.9	311	591.5
Real Wage, Public sector, %	na	na	17.3	-8.7	-23.2	-4.5	-29.5*	na
Broad money, %	17	125	42	48	79	40	111	na
Budget deficit, % of GDP	na	na	-5.2	-10.9	-5.8	-6.4	-13.4	-6.3
Budget expenditures, % of GDP	65.9	45.6	45.4	48.1	45.7	43	47.6	na
Current account, million USD	-1.180	-406	-801	-1.386	-203	-59	117	65
Trade balance, million USD	na	404	-212	-885	-17	120	209	180
Export of goods, million USD	2.534	2.734	3.956	3.727	3.935	5.344	4.881	na
Import of goods, million USD	3.086	2.330	4.169	4.612	3.952	5.224	4.673	na
Foreign exchange reserves, gold excluded, million USD	na	331	935	655	1.002	1.236	518	na
Gross External Debt, million USD	10.000	11.802	12.548	13.890	11.411	10.229	9.660	na

* - January - September

Source: Transition report update, April 1997, EBRD, p. 39, Transition report 1997 Enterprise performance and growth, EBRD, p. 219, Tailbut P., L'économie bulgare en 1996-1997: une crise majeure, Le Courrier des Pays de l'Est, No 419, 1997.

Table 2. Foreign - trade partners of Bulgaria - export and import

	1990	1991	1992	1993	1994	1995*
Export to, %						
OECD countries	9.0	26.3	42.4	43.2	47.6	51.2
CEE	80.2	57.7	39.2	35.1	35.6	33.1
Others	10.8	16.0	18.4	21.7	16.8	15.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Import from, %						
OECD countries	14.9	32.8	43.8	44.8	46.6	46.9
CEE	75.9	48.4	36.3	36.6	41.2	42.6
Others	9.2	18.8	19.9	18.6	12.2	10.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

* - Preliminary data.

Source: Etudes économiques de l'OCDE - Bulgarie, OCDE, 1997, p.30.

Table 3. Export of industrial goods from Bulgaria to the countries of the European Community (STIC 05-08)

	1990	1991	1992	1993	1994	1995
EC-12, million USD	439181	584817	818490	816799	1212685	1836243
Structure, %	100.0	100.0	100.0	100.0	100.0	100.0
Dynamics, average yearly rate of growth, %	-	33.2	40.0	-0.2	48.5	51.4
Germany, million USD	161691	197319	285624	264229	357182	420428
Relative share in the export to the EC-12, %	36.8	33.7	34.9	32.3	29.4	22.9
Dynamics, average yearly rate of growth, %	-	22.0	44.8	-7.5	35.2	17.7
Italy, million USD	90837	102600	174963	161966	268901	432700
Relative share in the export to the EC-12, %	20.7	17.5	21.4	19.8	22.2	23.6
Dynamics, average yearly rate of growth, %	-	12.9	70.5	-7.4	66.0	60.9
France, million USD	37268	67925	75228	76673	87052	129284
Relative share in the export to the EC-12, %	8.5	11.6	9.2	9.4	7.2	7.0
Dynamics, average yearly rate of growth, %	-	82.3	10.8	1.9	13.5	48.5
Austria, million USD	12792	18912	27545	31188	39593	35808
Relative share in the export to the EC-12, %	2.9	3.2	3.4	3.8	3.2	1.9
Dynamics, average yearly rate of growth, %	-	47.8	45.6	13.2	26.9	-9.6

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 4. Import of industrial goods in Bulgaria from the countries of the European Community (STIC 05-08)

	1990	1991	1992	1993	1994	1995
EC-12, million USD	957597	925968	1152434	1188926	1453194	1998476
Structure, %	100.0	100.0	100.0	100.0	100.0	100.0
Dynamics, average yearly rate of growth, %	-3.3	24.5	3.2	22.2	37.5	108.7
Germany, million USD	440856	423142	504455	475583	586902	843587
Relative share in the import from the EC-12, %	46.0	45.7	43.8	40.0	40.4	42.2
Dynamics, average yearly rate of growth, %	-	-4.0	19.2	-5.7	23.4	43.7
Italy, million USD	231823	206303	198501	223983	292920	386014
Relative share in the import from the EC-12, %	24.2	22.3	17.2	18.8	20.1	19.3
Dynamics, average yearly rate of growth, %	-	7.1	-3.8	44.6	6.8	0.2
France, million USD	86116	116667	201558	98043	115697	149890
Relative share in the import from the EC-12, %	9.0	12.6	17.5	8.2	8.0	7.5
Dynamics, average yearly rate of growth, %	-	35.5	72.8	-51.4	18.0	29.6
Austria, million USD	106734	102261	103318	103348	94739	131116
Relative share in the import from the EC-12, %	11.1	11.0	8.9	8.6	6.4	6.5
Dynamics, average yearly rate of growth, %	-	-4.2	1.0	0.0	-8.3	38.3

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 5. Trade with industrial goods between Bulgaria and the countries of the European Community (STIC - 1- digit level of desegregation)

	EC-12		Germany		Italy		France		Austria	
	1990	1995	1990	1995	1990	1995	1990	1995	1990	1995
Export, thousand USD										
05	79 650	313 701	14 720	15 521	15 418	82 766	6 461	40 506	1897	1855
06	167 737	866 874	52 778	113 982	49 459	211 235	9 160	33 301	3534	9698
07	77 858	175 308	20 304	78 520	18 491	31 394	8 470	16 086	2313	6583
08	113 936	480 360	73 889	212 405	7 469	107 305	13 177	39 391	5048	17672
Import, thousand USD										
05	167 223	300 737	71 585	110 366	21 628	34 447	22 901	39 633	11582	24049
06	197 871	505 794	105 656	192 709	36 354	116 882	14 051	28 329	36885	41189
07	502 355	870 446	225 151	468 359	156 818	133 127	41 603	62 378	46626	49837
08	90 148	321 499	38 464	72 153	17 023	101 558	7 561	19 550	11641	16051
Industrial commodities trade balance, USD thousand										
05	-87 583	12 964	-56 865	-94 845	-6 210	48 319	-16 440	873	-8048	-22194
06	-30 134	360 880	-52 878	-78 727	13 105	94 353	-4 891	4 972	-33351	-31491
07	-424 497	-695 138	-204 847	-389 839	-138 327	-101 733	-33 133	-46 292	-44313	-43254
08	23 788	158 861	35 425	140 252	-9 554	5 747	5 616	19 841	-6593	1621

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R)

Table 6. Structure and dynamics of the trade with industrial goods between Bulgaria and the countries of the European Community-12, 1990-1995, 2-digit level of desegregation, top 10 commodity groups

	1	2	3	4	5	6	7	8	9	10
Export										
Commodity group	67	84	68	56	85	65	52	51	74	77
Structure, %, 1995	19.37	17.58	16.00	6.53	4.36	3.99	3.45	3.39	2.93	2.80
Dynamics, %, 1990-1995	288.52	332.88	1885.07	402.86	884.14	186.63	569.13	158.43	76.28	350.46
Degree of penetration, EC, %	0.90	1.37	1.40	4.14	0.99	0.24	0.88	0.19	0.14	0.09
Import										
Commodity group	78	65	77	74	72	89	84	64	59	55
Structure, %, 1995	16.23	11.51	8.64	6.35	5.44	4.17	4.09	3.25	2.87	2.83
Dynamics, %, 1990-1995	490.80	372.68	257.78	3.67	-36.04	253.62	333.02	227.55	52.29	261.23

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 7. Structure and dynamics of the trade with industrial goods between Bulgaria and the countries of the European Community-12, 1990-1995, 3-digit level of desagregation, top 20 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	673	682	562	842	841	845	523	744	512	685
Structure,%, 1995	14.80	12.65	6.53	6.52	5.40	3.86	1.91	1.55	1.51	1.38
Dynamics,%, 1990-1995	261.88	1842.22	402.86	351.05	366.77	299.05	591.63	19.18	745.17	2530.05
Degree of penetration, EC, %	3.02	3.49	4.14	2.37	2.18	0.89	1.75	0.53	0.71	9.06
	11	12	13	14	15	16	17	18	19	20
Commodity group	522	676	679	778	844	541	686	672	684	773
Structure,%, 1995	1.27	1.20	1.14	1.01	0.95	0.91	0.88	0.87	0.72	0.66
Dynamics,%, 1990-1995	602.67	372.83	470.43	214.17	283.55	143.01	2285.52	494.43	5725.11	918.21
Degree of penetration, EC, %	0.69	0.27	0.39	0.14	0.93	0.27	1.40	0.66	0.13	0.24
	1	2	3	4	5	6	7	8	9	10
	Import									
Commodity group	783	775	781	782	741	778	542	684	784	772
Structure,%, 1995	7.81	4.18	3.77	1.93	1.86	1.47	1.42	1.31	1.31	1.17
Dynamics,%, 1990-1995	3218.19	1215.15	267.94	302.55	-13.91	118.36	126.81	335.27	87.50	121.45
	11	12	13	14	15	16	17	18	19	20
Commodity group	745	845	743	747	541	841	786	844	512	773
Structure,%, 1995	1.02	1.00	0.98	0.82	0.81	0.79	0.77	0.70	0.68	0.59
Dynamics,%, 1990-1995	-18.23	268.67	32.55	132.66	110.83	718.44	126.68	899.93	786.63	287.11

Source: L. Berko, Enchevretment industriel et gravitation commerciale, (P95-2030-R).

Table 8. Characteristics of the most exported industrial goods from Bulgaria to the countries of the EC-12, 1995

	Commodity group	Technology	Orientation	Wages	Qualification
1.	673 - Profiles - iron and steel	Low technology	High resource - consumption	Average wages	Non qualified labor force
2.	682 - Copper	Average technology	High resource - consumption	Average wages	Non qualified labor force
3.	562 - Fertilizers manufactured	Average technology	Economy of scale	High wages	Qualified labor force
4.	842 - Outer male and children garments	Low technology	Labor - consumption	Low wages	Non qualified labor force
5.	841 -	Low technology	Labor - consumption	Low wages	Non qualified labor force
6.	845 - Outer garments and accessories	Low technology	Labor - consumption	Low wages	Non qualified labor force
7.	523 - Inorganic chemicals	Average technology	Economy of scale	High wages	Qualified labor force
8.	744 - Mechanic equipment for manipulations	High technology	-	Low wages	Non qualified labor force
9.	512 - Alcohol, phenol...	Average technology	Economy of scale	High wages	Qualified labor force
10.	685 - Lead	Average technology	Resource - consumption	Average wages	Non qualified labor force

Source: OCDE (1993) Politiques industrielles dans les pays de l'OCDE.

Table 9. Structure and dynamics of the trade with industrial goods between Bulgaria and Germany, 1990-1995, 2-digit level of desagregation, top 10 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	84	68	67	77	74	69	89	85	71	73
Structure,%, 1995	39.76	10.03	8.73	7.09	4.99	3.00	2.87	2.68	2.18	2.10
Dynamics,%, 1990-1995	195.78	563.51	27.53	1409.57	436.75	273.71	166.50	76.74	287.29	11.08
Degree of penetration, EC, %	2.29	0.79	0.41	0.24	0.28	0.27	0.19	0.41	0.25	1.23
	Import									
Commodity group	78	65	74	77	72	76	89	64	87	59
Structure,%, 1995	27.64	13.39	7.06	6.37	6.24	3.46	3.12	3.10	2.80	2.30
Dynamics,%, 1990-1995	651.86	248.92	4.34	83.39	-15.91	425.17	147.24	231.35	39.19	20.61

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 10. Structure and dynamics of the trade with industrial goods between Bulgaria and Germany, 1990-1995, 3-digit level of desegregation, top 20 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	842	841	845	682	673	778	773	744	844	541
Structure, %, 1995	16.99	10.19	9.61	9.41	7.96	2.88	2.68	2.57	1.63	0.94
Dynamics, %, 1990-1995	196.54	211.68	210.43	637.49	35.57	1428.57	29515.79	499.61	111.58	138.51
Degree of penetration, EC, %	4.81	3.83	1.43	2.82	2.11	0.46	1.13	1.10	1.06	0.42
	11	12	13	14	15	16	17	18	19	20
Commodity group	747	772	846	511	741	775	745	784	843	679
Structure, %, 1995	0.89	0.81	0.74	0.62	0.50	0.46	0.43	0.40	0.39	0.34
Dynamics, %, 1990-1995	1214.79	658.35	309500.00	0.00	324.95	267.17	851.06	563.35	-23.40	54.92
Degree of penetration, EC, %	0.35	0.21	0.53	0.20	0.18	0.09	0.30	0.04	0.52	0.13
	1	2	3	4	5	6	7	8	9	10
	Import									
Commodity group	783	781	782	772	786	741	778	542	774	743
Structure, %, 1995	16.77	4.77	2.53	1.53	1.48	1.39	1.36	1.24	1.18	1.16
Dynamics, %, 1990-1995	130.77	147.23	106.68	73.06	20.45	146.23	-43.69	-48.81	-88.90	-69.81
	11	12	13	14	15	16	17	18	19	20
Commodity group	745	775	684	784	747	541	773	744	742	513
Structure, %, 1995	1.09	1.07	0.80	0.76	0.74	0.71	0.69	0.65	0.57	0.55
Dynamics, %, 1990-1995	75.78	72.13	-45.83	-96.03	-54.81	-55.84	14.29	-64.20	-49.68	6700.00

Source: L. Berko, Enchevretment industriel et gravitation commerciale, (P95-2030-R).

Table 11. Structure and dynamics of the trade with industrial goods between Bulgaria and Italy, 1990-1995, 2-digit level of desegregation, top 10 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	67	68	85	84	56	65	51	74	83	52
Structure,%, 1995	20.10	12.86	10.78	10.45	10.22	8.52	4.02	3.55	2.16	2.04
Dynamics,%, 1990-1995	195.94	1841.61	0.00	945.21	5204.80	307.74	66.96	36.97	750.59	695.94
Degree of penetration, EC, %	1.57	1.70	14.56	3.23	24.04	1.08	0.37	0.32	8.60	1.21
	Import									
Commodity group	77	65	85	74	72	84	89	64	66	61
Structure,%, 1995	14.45	12.05	10.12	7.28	7.25	4.92	4.67	4.45	4.04	3.78
Dynamics,%, 1990-1995	691.54	632.43	593.48	-18.40	-63.87	340.89	378.86	91.10	395.61	2185.45

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 12. Structure and dynamics of the trade with industrial goods between Bulgaria and Italy, 1990-1995, 3-digit level of desegregation, top 20 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	673	562	682	841	685	672	744	523	512	845
Structure,%, 1995	14.93	10.22	6.46	5.93	3.62	2.80	2.13	1.97	1.93	1.85
Dynamics,%, 1990-1995	162.05	5204.80	1090.84	772.28	130533.33	480.95	0.15	7725.69	513.20	661.01
Degree of penetration, EC, %	4.05	24.04	2.41	7.16	44.18	4.41	1.89	4.10	1.46	1.60
	11	12	13	14	15	16	17	18	19	20
Commodity group	842	686	541	676	746	513	684	514	679	843
Structure,%, 1995	1.66	1.64	1.43	1.33	1.07	0.85	0.75	0.60	0.59	0.49
Dynamics,%, 1990-1995	3598.45	1742.08	724.87	2222.58	1932.60	502.29	2536.59	-2.88	29.26	35566.67
Degree of penetration, EC, %	3.03	7.02	0.69	0.70	0.77	0.37	0.21	0.34	0.51	3.34
	1	2	3	4	5	6	7	8	9	10
	Import									
Commodity group	775	778	741	512	745	841	784	781	747	845
Structure,%, 1995	11.15	2.55	2.33	2.07	2.00	1.20	1.16	1.15	0.94	0.88
Dynamics,%, 1990-1995	1344.41	1154.72	-41.33	15007.55	-12.32	307.60	102.95	158.57	1910.50	417.61
	11	12	13	14	15	16	17	18	19	20
Commodity group	684	743	843	782	842	844	846	676	542	772
Structure,%, 1995	0.83	0.80	0.80	0.77	0.73	0.63	0.57	0.56	0.50	0.45
Dynamics,%, 1990-1995	368.42	12.76	789.02	60.40	391.29	1900.83	51.69	-8.41	254.98	402.03

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030).

Table 13. Structure and dynamics of the trade with industrial goods between Bulgaria and France, 1990-1995, 2-digit level of desegregation, top 10 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	84	56	67	52	66	77	85	51	82	74
Structure,%, 1995	18.99	17.02	13.88	6.90	6.31	4.89	4.55	3.44	3.25	3.18
Dynamics,%, 1990-1995	346.85	1361.93	406.09	30644.83	1700.00	91.86	803.38	276.86	29.91	101.42
Degree of penetration, EC, %	0.69	3.02	0.23	0.61	0.22	0.07	0.38	0.09	0.18	0.05
	Import									
Commodity group	78	74	77	65	55	54	89	72	59	75
Structure,%, 1995	11.94	8.10	8.04	7.85	7.50	5.78	5.66	5.40	5.32	5.10
Dynamics,%, 1990-1995	134.89	56.03	219.14	128.88	84.02	617.72	365.50	-8.15	3.53	842.00

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 14. Structure and dynamics of the trade with industrial goods between Bulgaria and France, 1990-1995, 3-digit level of desegregation, top 20 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	562	673	841	523	845	842	512	778	776	747
Structure,%, 1995	17.02	13.25	7.33	6.90	5.19	5.03	2.87	2.28	1.19	0.99
Dynamics,%, 1990-1995	1361.93	403.79	417.31	148500.00	457.52	398.01	775.89	48.19	0.00	851.85
Degree of penetration, EC, %	3.02	0.82	1.47	1.98	0.51	1.05	0.64	0.13	0.10	0.14
	11	12	13	14	15	16	17	18	19	20
Commodity group	775	541	744	784	679	844	746	848	685	749
Structure,%, 1995	0.96	0.82	0.69	0.65	0.55	0.51	0.48	0.46	0.40	0.30
Dynamics,%, 1990-1995	1410.98	111.82	-44.49	1992.50	0.00	46.89	1260.87	648.10	0.00	839.02
Degree of penetration, EC, %	0.07	0.08	0.08	0.02	0.08	0.20	0.12	0.39	1.28	0.11
	1	2	3	4	5	6	7	8	9	10
	Import									
Commodity group	781	542	772	741	782	541	747	778	743	784
Structure,%, 1995	6.41	3.45	3.29	3.17	2.58	2.33	2.02	1.91	1.84	1.60
Dynamics,%, 1990-1995	480.91	435.06	254.46	59.01	479.34	1349.79	316.83	272.11	114.96	11.81
	11	12	13	14	15	16	17	18	19	20
Commodity group	512	783	776	679	773	846	675	775	771	841
Structure,%, 1995	1.55	1.18	0.89	0.74	0.73	0.63	0.50	0.47	0.47	0.41
Dynamics,%, 1990-1995	46440	894.38	195.14	66.62	279.31	841.00	1036.36	6.98	1300.00	3731.25

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 15. Structure and dynamics of the trade with industrial goods between Bulgaria and Austria, 1990-1995, 2-digit level of desegregation, top 10 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	84	82	67	69	89	71	72	68	66	74
Structure,%, 1995	29.76	8.62	7.00	5.51	5.36	4.86	4.69	4.33	4.19	4.02
Dynamics,%, 1990-1995	313.99	188.32	76.28	147.37	64.24	1512.04	519.56	364.07	294.47	136.12
Degree of penetration, EC, %	0.47	0.26	0.17	0.09	0.06	0.15	0.10	0.13	0.14	0.05
	Import									
Commodity group	74	77	65	69	78	62	64	76	87	54
Structure,%, 1995	11.27	8.68	8.15	7.60	6.35	5.10	4.77	4.56	4.14	3.92
Dynamics,%, 1990-1995	35.27	93.70	380.31	17.43	137.65	66.14	73.83	363.49	37.18	1290.00

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 16. Structure and dynamics of the trade with industrial goods between Bulgaria and Austria, 1990-1995, 3-digit level of desegregation, top 20 commodity groups

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	845	841	842	673	685	843	679	781	516	747
Structure,%, 1995	10.88	9.24	5.28	4.81	3.32	3.26	1.40	1.29	1.21	1.16
Dynamics,%, 1990-1995	125.65	400.30	1365.89	40.23	0.00	2142.31	1512.90	1217.14	148.85	2680
Degree of penetration, EC, %	0.62	0.83	0.27	0.88	4.53	1.73	0.13	0.01	0.65	0.10
	11	12	13	14	15	16	17	18	19	20
Commodity group	744	844	671	784	743	513	682	512	684	742
Structure,%, 1995	1.07	0.97	0.78	0.73	0.70	0.64	0.45	0.44	0.42	0.39
Dynamics,%, 1990-1995	92.93	11466	73.29	6475	1040	-19.37	37.29	387.50	0.00	4533.33
Degree of penetration, EC, %	0.10	0.17	0.63	0.02	0.06	0.18	0.04	0.20	0.02	0.04
	Import									
Commodity group	542	745	742	775	781	747	782	513	774	846
Structure,%, 1995	3.75	2.80	2.53	2.25	2.11	2.00	1.74	1.71	1.70	1.61
Dynamics,%, 1990-1995	1789.62	398.24	319.34	1329.61	187.45	109.76	30.41	312.15	2832.89	108.93
	11	12	13	14	15	16	17	18	19	20
Commodity group	772	743	741	778	677	783	784	786	675	748
Structure,%, 1995	1.52	1.43	1.16	1.04	0.99	0.90	0.85	0.72	0.71	0.64
Dynamics,%, 1990-1995	-33.19	-15.35	-46.02	-24.71	24.09	345.83	187.89	688.33	-8.79	15.32

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030).

Table 17. Specialization of the trade with industrial goods between Bulgaria and the countries of the European Community-12

	1	2	3	4	5	6	7	8	9	10
Export										
Commodity group	673	682	562	842	841	845	523	744	512	685
Relative share, %	14.80	12.65	6.53	6.52	5.40	3.86	1.91	1.55	1.51	1.38
I	1275.40	1474.57	17.49	1000.21	921.85	375.28	739.70	224.52	299.42	3831.63
II	21.91	29.10	2.89	56.18	111.46	88.21	102.37	55.64	182.96	0.14
III	-	-	-	-	-	-	-	-	-	-
IV	14.56	12.41	6.52	6.09	4.61	2.87	1.78	1.14	0.83	1.38
V	3.13	3.78	0.29	12.47	25.48	41.00	12.99	41.87	61.91	0.01
Import										
Commodity group	783	775	781	782	741	778	542	684	784	772
Relative share, %	7.81	4.18	3.77	1.93	1.86	1.47	1.42	1.31	1.31	1.17
I	3.69	25.06	0.93	1.18	20.03	59.03	6.05	53.85	8.72	23.09
II	830.58	348.10	40.54	140.30	220.41	75.40	89.03	15.71	36.97	83.80
III	-	-	-	-	-	-	-	-	-	-
IV	-7.78	-3.87	-3.68	-1.92	-1.70	-0.46	-1.32	-0.59	-0.97	-0.87
V	3.13	3.78	0.29	12.47	25.48	41.00	12.99	41.87	61.91	0.01

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 18. Specialization: Bulgaria - Germany

	1	2	3	4	5	6	7	8	9	10
Export										
Commodity group	842	841	845	682	673	778	773	744	844	541
Relative share, %	16.99	10.19	9.61	9.41	7.96	2.88	2.68	2.57	1.63	0.94
I	1956.09	1558.61	581.58	1145.70	857.37	185.26	457.87	447.41	431.31	171.49
II	19.77	48.28	63.31	27.18	43.98	45.77	134.00	75.47	92.16	96.63
III	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
IV	16.85	10.00	9.40	9.15	7.52	1.52	1.99	1.92	1.55	0.23
V	1.56	3.72	4.23	5.48	10.50	64.11	40.88	40.53	10.24	86.18
Import										
Commodity group	783	781	782	772	786	741	778	542	774	743
Relative share, %	16.77	4.77	2.53	1.53	1.48	1.39	1.36	1.24	1.18	1.16
I	0.00	2.68	2.91	83.68	51.59	74.09	185.26	6.86	8.33	6.98
II	1190.13	43.03	146.76	70.42	395.80	212.70	45.77	121.74	362.76	106.22
III	-0.04	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IV	-16.77	-4.49	-2.49	-0.72	-1.40	-0.89	1.52	-1.15	-1.17	-1.11
V	1.56	3.72	4.23	5.48	10.50	64.11	40.88	40.53	10.24	86.18

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 19. Specialization: Bulgaria - Italy

	1	2	3	4	5	6	7	8	9	10
Export										
Commodity group	673	562	682	841	685	672	744	523	512	845
Relative share, %	14.93	10.22	6.46	5.93	3.62	2.80	2.13	1.97	1.93	1.85
I	838.04	4978.74	499.99	1483.28	9150.63	913.05	391.67	849.07	301.50	331.62
II	7.16	0.00	24.97	93.74	0.00	0.00	36.54	122.20	1383.56	34.63
III	0.03	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
IV	14.90	10.20	6.30	4.74	3.62	2.80	1.82	1.90	-0.14	0.98
V	0.42	0.00	4.70	35.53	0.00	0.00	25.62	7.00	96.47	64.16
Import										
Commodity group	775	778	741	512	745	841	784	781	747	845
Relative share, %	11.15	2.55	2.33	2.07	2.00	1.20	1.16	1.15	0.94	0.88
I	1.88	5.91	1.55	301.50	2.96	1483.28	7.83	0.16	22.01	331.62
II	368.16	180.38	141.45	1383.56	150.25	93.74	37.10	23.13	74.68	34.63
III	-0.02	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00
IV	-11.14	-2.43	-0.02	0.00	-0.02	0.05	-0.01	-0.01	-0.01	0.01
V	0.42	0.00	4.70	33.53	0.00	0.00	25.62	7.00	96.47	64.16

Source: L. Berko, Enchevetrement industriel et gravitation commerciale, (P95-2030-R).

Table 20. Specialization: Bulgaria - France

	1	2	3	4	5	6	7	8	9	10
Export										
Commodity group	562	673	841	523	845	842	512	778	776	747
Relative share, %	17.02	13.25	7.33	6.90	5.19	5.03	2.87	2.28	1.19	0.99
I	3189.98	870.19	1557.99	2093.13	535.33	1115.24	672.71	139.81	108.76	145.43
II	0.00	0.00	133.73	157.56	16.85	59.95	382.76	104.11	40.42	420.53
III	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IV	17.02	13.25	6.92	6.70	5.05	4.66	1.31	0.37	0.30	-1.02
V	0.00	0.00	10.57	5.42	5.19	13.79	70.28	91.20	85.73	66.04
Import										
Commodity group	781	542	772	741	782	541	747	778	743	784
Relative share, %	6.41	3.45	3.29	3.17	2.58	2.33	2.02	1.91	1.84	1.60
I	0.00	0.00	21.98	22.51	0.00	89.29	145.43	139.81	26.95	18.51
II	76.72	185.86	200.30	351.82	219.26	367.65	420.53	104.11	237.08	27.29
III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IV	-6.41	-3.45	-3.02	-3.01	-2.58	-1.51	-1.02	0.37	-1.60	-0.96
V	0.00	0.00	10.57	5.42	5.19	13.79	70.28	91.20	85.73	66.04

Source: L. Berko, Enchevetrement industriel et la gravitation commerciale, (P95-2030).

Table 21. Specialization: Bulgaria – Austria

	1	2	3	4	5	6	7	8	9	10
	Export									
Commodity group	845	841	842	673	685	843	679	781	516	747
Relative share, %	10.88	9.24	5.28	4.81	3.32	3.26	1.40	1.29	1.21	1.16
II	52.49	16.60	20.89	9.93	0.00	67.10	43.08	61.10	253.87	333.11
I	749.70	1008.49	325.70	1062.51	5467.77	2091.80	161.60	15.25	789.08	118.83
III	0.0044	0.0043	0.0023	0.0019	0.0016	0.0014	-0.0002	-0.0031	0.0001	-0.0029
IV	10.45	9.18	5.17	4.61	3.32	3.19	0.88	-0.83	0.95	-0.84
V	7.62	1.25	3.99	7.92	0.00	4.04	54.10	75.72	34.97	73.61
	Import									
Commodity group	542	745	742	775	781	747	782	513	774	846
Relative share, %	3.75	2.80	2.53	2.25	2.11	2.00	1.74	1.71	1.70	1.61
II	504.45	456.36	496.17	323.19	61.10	333.11	110.02	3378.48	1214.20	436.54
I	16.28	20.39	48.48	0.69	15.25	118.83	3.40	214.16	4.66	21.14
III	-0.0063	-0.0048	-0.0042	-0.0039	-0.0031	-0.0029	-0.0030	-0.0027	-0.0029	-0.0028
IV	-3.39	-2.60	-2.14	-2.23	-0.83	-0.84	-1.70	-1.07	-1.69	-1.54
V	17.17	13.22	26.61	0.99	75.72	73.61	5.30	54.51	1.31	8.01

Source: L. Berko, Enchevretment industriel et gravitation commerciale.(P95-2030-R).

Privatization, Ownership and Firms in Transition

Untangling the Paradox of Privatization Revenues*

Dirck Süß

A. Revenues from Privatization - How Important Are They?

Since the middle of the 1980s privatization has become an important subject of economic policy all over the world. Countries as different as Great Britain, Mexico or Nigeria have launched privatization programs during that time (Kikeri, Nellis et al. 1992). Besides increasing efficiency and depoliticizing the economy, the restoration of public finances has always been an important argument for putting privatization on the agenda. Apart from more indirect effects like hardening the enterprises' budget constraints and thus enabling politicians to cut subsidies, or higher tax proceeds due to more efficiency, the revenues from the sale of enterprises are generally seen as an important fiscal effect of privatization. In Great Britain for instance, lowering the public sector borrowing requirement by the help of privatization revenues was a substantial aim of the privatization program (Kay and Thompson 1986: 27). While preparing for the monetary union, many EU-member countries like France or Germany had started new privatization campaigns to raise revenues in order to meet the Maastricht criteria.

After the collapse of the socialist systems in Central and Eastern Europe towards the end of the last decade most countries in that region jumped on to the privatization train. Along with stabilization and liberalization, privatization was seen as the key element of any successful transformation strategy. As in established market economies, privatization in countries in transition pursues a large and diverse number of objectives but possible revenues usually play an important role (Süß 1997). Many countries started the transition period with a heavy burden of high internal and external debt. In most cases the situation was worsened by a fiscal crisis that evolved during the course of the transition period. It was caused by a drop in revenues (IMF-Staff 1995) and simultaneously increasing expenditures (Barbone and Marchetti 1995). Therefore revenues from privatization were often seen as a welcome source of income during this period.

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This paper first examines the privatization process in Poland, the Czech Republic and Hungary with a focus on the revenues raised in the period from 1991 to 1996 (B). I shall then compare the results and analyze to what extent they were to be expected (C). In part D I shall try to work out some factors determining privatization revenues. The last section concludes.

B. Privatization in Poland, Hungary and the Czech Republic

Poland, the Czech Republic and Hungary all started the transition process with large public sectors, but there were differences between the countries. In Poland and Hungary the classical soviet type economic system had been reformed several times. In Poland far-reaching property rights reforms had taken place during the 80s. Although formally still state-owned, firms had become more autonomous and employees had secured rights to co-determination. Besides these reforms in state owned enterprises (SOE) the largest part of agriculture remained private in Poland during the socialist era. In Hungary property rights reforms and liberalization had taken place ever since the middle of the 50s. In the course of these reforms employees and especially managers had secured essential control rights over SOEs. Outside the state owned sector private economic activity had become possible in some sectors of the economy and had gained increasing importance (Heinrich 1994: 58-59). In the Czech Republic the situation was different: After the Soviet suppression of the „Prague Spring“ no more attempts to reform the economy had been made. Almost all enterprises were state owned and the proprietor executed his rights through a system of strict central planning (Begg 1991). These differences in the degree of liberalization and property rights reforms resulted in different shares of the private sector in the economy at the beginning of the actual transition process:

Table 1. Public Sector Share in GDP

	Czechoslovakia	Hungary	Poland
1988	99,3	92,9	81,2

Source: Kornai (1995)

Another important difference between the countries was the overall economic environment at the beginning of the transition process and -of particular importance for this study- the situation of state budgets. Poland and Hungary were both suffering from severe macroeconomic imbalances: High inflation rates coincided with high internal and/or external debts. Again in Czechoslovakia the initial position was different: Inflation rate, budget-deficit and external debt were low compared to the two other countries and international standards.

Table 2. Macroeconomic Situation at the Outset of Transition (1989)

		Hungary	Poland	Czech Republic
Budget Deficit	(in % of GDP)	-1,4	-7,4	-2,8
External Debt	(in Billions US \$)	19,2	40,2	6,8
	(per capita in US \$)	1846	1058	660
Inflation Rate	(annual average in %)	17,0	251,1	2,3

Source: EBRD (1995)

The different starting-positions concerning the distribution of property rights and the necessity to react to the economic situation resulted in the choice of different privatization strategies. Poland and Hungary both decided at first on a sales oriented strategy with a

keen eye on possible privatization revenues to balance the budget and repay foreign debt. Experiences from privatization programs in other countries were taken into account. In the Czech Republic a more innovative privatization plan was drawn up. Privatization was to be carried out in two large waves and the free distribution of property by the help of vouchers played an important role. In all three countries privatization can be divided into two large areas which proceeded at different speed and according to different rules: The small privatization and the large privatization. Small privatization is most commonly defined as the privatization of smaller enterprises from the trade, crafts, and service sector of an economy. Large privatization applies to the big state enterprises which constitute the most substantial part of the socialist economies in terms of contribution to GDP.

In Poland small privatization was carried out by the municipalities. Most enterprises were auctioned, sold or leased to insiders, i.e. to former employees or managers for relatively low prices. Since each municipality had its own privatization program, almost no data on the obtained income is available. But since the municipalities were entitled to the revenues from small privatization, there was no transfer to the central budget or other central funds from this program (Earle, Frydman et al. 1994). For the large privatization in Poland a ministry was created. Until the start of the mass privatization program in December 1995 it was executed mainly in two ways: Capital privatization (sale) and liquidation (in two variants). Originally the sale of enterprises either as a whole to large core investors or of smaller parts to the public was planned to become the main method of privatization. Considerable proceeds were expected. But until the middle of 1995 only 142 out of over 8000 enterprises were privatized in that manner and revenues stayed on a low level. Privatization by liquidation has been the more important method. Under this program enterprises are liquidated and assets sold individually. In most cases the new owners of assets were the old managers and employees of enterprises. Often revenues from the sale were used to pay enterprises' debts. Although privatization through liquidation became an important way to privatize, at the end of 1995 more than half of the Polish enterprises up for privatization were still state owned (Dabrowski 1996). Revenues from privatization remained low in absolute terms and compared to the state budget deficit.

Table 3. Revenues from Privatization in Poland

Year	1991	1992	1993	1994	1995	1996
Revenues (Mio. of new Z ³ oty)	170,9	498,9	789,4	1614,7	2641,6	3220
% GDP	0,2	0,4	0,5	0,8	0,9	0,9
Budget deficit in % GDP	3,8	6,0	2,8	2,7	2,7	2,1

Sources: Polish Ministry of State Treasury (Ministerstwo Skarbu Pastwa), Bundesministerium für Wirtschaft (BMWi) and own calculations.

In December 1995 512 enterprises entered the mass privatization program and were turned over to 15 National Investment Funds (NIF) in which the population could become shareholders for vouchers distributed in exchange for a nominal fee. Mass privatization usually means relinquishment of revenues, because the public property is distributed for free. In the Polish case the government might obtain some income later, because it kept 25% of the shares which can be sold later via the stock exchange. It should be mentioned that in Poland employees of public enterprises were able to safeguard substantial control

rights which they had gained during the reforms of the 80s. In most cases they were involved in the privatization process and enjoyed preferential treatment in many ways (Heinrich 1994; Mohlek 1996).

In Hungary the privatization program was mainly based on direct enterprise sales. Raising revenues to pay back foreign debt was an important aim. After a phase of spontaneous privatization from 1988 to 1989 the State Property Agency (SPA) was founded to stop the process of uncontrolled transformation of public assets to semi-private joint ventures and to secure revenues for the state (Sarközy 1996). The small privatization was carried out mainly in 1991 and '92. The most frequently used method was an auction approach. Many smaller enterprises such as gas stations or hotels that belonged to chains of enterprises were not part of the program. The SPA planned to sell them en bloc. Due to that decision and the fact that many enterprises in the trade and service sector were already private following the liberalization of the 80s in Hungary the small privatization program was not as extensive as in the other countries (Lagemann, Friedrich et al. 1994; Major 1994). In the process of large privatization several programs were launched which also relied on sales either for cash or partly for so called compensation vouchers which were issued as part of the Hungarian restitution program. Most commonly a case by case approach was applied. This means that in most cases the privatization agency entered into lengthy negotiations with possible investors thus keeping the process at a slow pace (Major 1994).

The establishment of a second privatization and holding agency and plans to introduce a new privatization law brought the process to a grinding halt at the end of 1994 (Mihályi 1996). After the new law was in effect, privatization sped up again. Revenues from privatization were higher than in Poland in most years but with the exception of 1995 they fell short of expectations.

Table 4. Revenues from Privatization in Hungary

Year	1991	1992	1993	1994	1995	1996
Revenues (Bio. HUF)	30,35	62,99	134,86	36,86	451,57	180,1
% GDP	1,2	2,3	3,8	1,0	8,0	2,7
Budget deficit % GDP	2,1	6,2	5,4	9,8	6,2	3,3

Sources: Hungarian Privatization and State Holding Company (APV Rt.), Bundesministerium für Wirtschaft (BMWi), National Bank of Hungary, and own calculations.

Privatization in the Czech Republic differed in many ways from the privatization programs in Hungary and Poland. Unlike in these countries the Czechs decided relatively early to give property confiscated under socialism back to former owners or their heirs. With respect to possible privatization revenues such a restitution program is relevant in two ways: Firstly giving away property for free means relinquishment of revenues in exchange for justice (Appel 1995). Secondly a restitution program can lead to uncertainties about ownership rights and scare off investors as the German experience had shown (Sinn and Sinn 1993). But due to the comfortable situation of the state budget the Czech decision makers were not dependent on the revenues and could afford to introduce a restitution program. Small privatization was conducted mainly through auctions in which any interested Czech citizen could take part. Unlike in Hungary almost all small enterprises were included in the program and unlike in Poland revenues had to be transferred to a central institution (Fund of National Property). More than 50.000

enterprises were privatized by the end of 1992, either by restitution (30.000) or auctions (22.400) (Kotrba and Svejnar 1994).

But what makes privatization in the Czech Republic unique with respect to speed, revenues, institutional setting, and applied methods is the large privatization program known as mass privatization. Under this program more than 2300 large enterprises were privatized in two waves within less than 4 years. There were several institutions involved in the Czech privatization: The ministries of privatization and of finance were responsible for evaluating and choosing privatization projects. The Funds of National Property had to organize the actual privatization and were in charge of the proceeds¹ (Kubin and Tůma 1997). The enterprises were assigned to the two waves of privatization and vouchers were sold for a small nominal fee to the population. The management of the enterprises had to work out a plan for privatization within a short deadline. Possible methods of privatization were not only the transfer of shares in exchange for vouchers, but also sale of shares to small investors, selling or auctioning the firm to a core investor or transferring the enterprise to a municipality or a public organization, for example social security insurance. Besides the obligatory working out of a privatization plan by the management every other interested person or organization, no matter if of domestic or foreign origin, was allowed to work out a privatization plan and hand it to the ministry of privatization. Here the most suitable project was chosen and the enterprise was transferred to the Fund of National Property for privatization (Kotrba and Svejnar 1994). Because free transfer for vouchers was not the only way of privatization, remarkable revenues from privatization could be obtained in the Czech Republic:

Table 5. Revenues from Privatization in the Czech Republic

Year	1991	1992	1993	1994	1995	1996
Revenues (Bio. Kr)	18,5	38,4	25,9	30,6	25,9	24,5
Revenues (% GDP)	2,6	4,9	2,8	2,9	2,1	1,7
Budget Deficit (Surplus) ^a (%GDP)			+0,2	+0,9	+0,3	- 0,4

^a There are no figures for 1991 and 1992 because the Czech Republic still formed a unit with the Slovak Republic at that time.

Sources: Fund of National Property of the Czech Republic, Bundesministerium für Wirtschaft (BMWi), and own calculations

C. The Paradox of Privatization Revenues

So far it has been pointed out that privatization strategies and the initial conditions in the analyzed countries were quite different. But how were the obtained revenues effected by these differences? Comparing the revenues from privatization in the three countries uncovers a surprise:

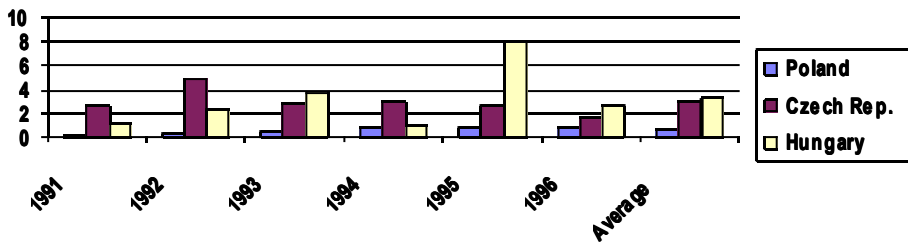
¹ There was one ministry of privatization in the Czech Republic and one ministry of privatization in the Slovak Republic. On the national level the ministry of finance took over the role of a ministry of privatization. Following this scheme, three funds of national property were created.

Table 6. Privatization Revenues in % of GDP

Year	1991	1992	1993	1994	1995	1996	Average
Poland	0,2	0,4	0,5	0,8	0,9	0,9	0,6
Czech Republic	2,6	4,9	2,8	2,9	2,1	1,7	2,8
Hungary	1,2	2,3	3,8	1,0	8,0	2,7	3,2

Sources: See Tables 3-5

Chart 1. Revenues from Privatization in % of GDP 1991-1996



Revenues in Poland are significantly lower than in the other countries, in Hungary there are large changes from year to year, while in the Czech Republic revenues developed more steadily and are only slightly lower than in Hungary². There are several reasons why this result is indeed surprising and can be called the “paradox of privatization revenues“:

- In the Czech Republic, the macroeconomic starting-position with low internal and external debt was a lot better than in the other countries and privatization revenues were not really needed to stabilize the situation. The budget of the Fund of National Property was therefore separated from the state budget.
- The voucher method, which means giving away parts of enterprises for free and therefore the relinquishment of revenues was an important part of the Czech privatization.
- In the Czech Republic a considerable amount of property was returned to former owners in the restitution program. This also means no revenues for the state and can lead to a retreat of investors, if there is uncertainty about which enterprises might be given back to former owners, as it was the case in Germany.
- In Poland and Hungary revenues from Privatization were seen as a welcome source of income to help balance the budgets and pay back external debt. Therefore, besides arguments related to corporate governance issues, privatization via sales was chosen as the main method of privatization.

² For similar results see Antczak (1996).

In short, the paradox is that the country which was least dependent on privatization revenues and where the chosen privatization methods were least likely to lead to considerable proceeds performed best with respect to direct income from privatization.

D. Untangling the Paradox

Trying to untangle the paradox means analyzing different factors that might have influenced revenues from privatization. Microeconomic theory teaches that prices are determined by supply and demand and by the institutional setting in which these two come together. This basic insight sets the stage for a further inquiry into the determinants of the revenue paradox.

1. Supply Side Explanations

a) Different amount of privatized property

A relatively simple explanation for the differences in proceeds from privatization would be that in the Czech Republic more property has been privatized so far and therefore the income has been higher. The more property is sold the higher revenues ought to be. The different amount of privatized property can be due to a larger public sector at the beginning of the transition period or faster privatization.

Table 1 shows that in fact the public sector in the Czech Republic was larger than in the other two countries at the start of privatization. But private activities in Poland and Hungary almost exclusively took place in the agricultural, small trade, and service sectors. Therefore, the higher revenues from privatization due to different sizes of the public sector should mainly stem from small privatization. In fact the revenues from small privatization in the Czech Republic were considerably larger than in Hungary. They equaled 2,3 % and 1,8% of GDP in the Czech Republic in 1991 and 1992. In Hungary only 0,2% of GDP were earned during the same period in which small privatization was completed. Unfortunately there are no figures for Poland. What cannot be explained by differences in the size of the public sector are the high revenues from large privatization, because enterprises included in these programs dominated the economy and were completely state owned in all three countries.

Another possibility to explain the differences in revenues from large privatization from supply side would be that in the Czech Republic already a larger part of the public sector has been privatized. Given the numbers of privatized enterprises this explanation suits the problem. According to World Bank estimates at the end of 1995 in the Czech Republic only 10% of the enterprises were still state owned while in Hungary 22% and in Poland 54 % were still public. But what is more important with respect to privatization revenues is the value of state owned property. Here the World Bank estimates that 40% of the value of the former state sector are not yet privatized in Hungary as well as in the Czech Republic, while for Poland there are no estimations (World Bank 1996: 53). Considering the fact that in Hungary most enterprises have been sold, while in the Czech Republic a large part has been given away differences in the amount of completed privatizations cannot provide a satisfactory explanation for the paradox of revenues in a comparison between Hungary and the Czech Republic. For Poland however the explanation partly suits the problem: Many of the valuable enterprises, namely the utilities which privatization led to the boost in Hungary's revenues in 1995, are still state owned.

b) The problem of absorption

While the argument in the preceding part was that revenues are likely to be higher when more enterprises are privatized it can also be argued that the opposite is true. Sinn and Sinn (1993: 134) for example hold that the law of supply and demand applies to the market for enterprises as well as for any other market. A massive shift in the supply curve must lead to a drop of prices due to three reasons:

- i. Portfolio Effect: The number of entrepreneurs willing to take high risks associated with a participation in former state enterprises is limited. The more enterprises are sold, the more risk averse investors have to be convinced to buy an enterprise. The more risk averse investors are the less likely they will pay high prices.
- ii. Microeconomic limitation of available credits: To get a credit from a bank in order to buy an enterprise a certain amount of equity is necessary. Since the total amount of equity in an economy is limited - especially in the transition economies- capital markets cannot supply willing investors with enough credits to buy enterprises for a reasonable price. The more enterprises are being privatized, the lower will be the average amount of money available for a single purchase.
- iii. Macroeconomic limitation of available credits (stock-flow-constraint): Existing stocks of enterprises cannot be sold in a short period of time because there are not enough liquid flows available. Fast sale of stocks of property built up over a long period of time for liquid cash necessarily leads to low revenues.

These arguments seem to apply especially if privatization is carried out as fast as possible in a closed economy. The more open an economy is the more likely it is that participation of foreign investors and capital supply from abroad will contribute to solve the problem. Another possibility is to prolong the process and find a way to smooth the supply in a manner that makes it possible for the economy to absorb the enterprises into the private sector.

Consequently the differences in the revenues from privatization might be the result of different degrees of openness to foreign participation as well as timing and speed of the privatization process. If in the Czech Republic foreigners had a better chance to participate in privatization and the assets were privatized over a longer period, this could be the clue to the paradox of privatization revenues.

In most transition economies there is a fear of too massive foreign participation (Winiński 1996). In the countries considered here, the possibilities for foreigners to invest and participate in the privatization process were most unfavorable in Poland: Foreigners had the possibility to participate in capital privatization. But for many forms of investment, for example some forms of joint ventures, participation in public enterprises or the purchase of land and real estate special permissions were needed. Unrestricted activities of foreigners are only allowed in enterprises that do not own or lease any real estate. Tax Holidays for foreigners were only granted on a discretionary basis (Borish and No 1 1996).

In the Czech Republic and Hungary the conditions have been better. In Hungary it has been explicitly attempted to get foreigners involved in privatization. Foreigners can become 100% owners of privatized enterprises including all real estate. Foreign

investment is protected by a variety of laws and considerable tax holidays were granted. In the Czech Republic foreigners were excluded from the small privatization, but in large privatization they were allowed to hand in proposals just like any Czech citizen. Registered foreign enterprises can buy real estate without any restrictions and investments are possible in any size or sector. Until 1993 there were some tax holidays (Borish and No 1 1996).

Taking into account the conditions for foreign investment it can be explained in part why Hungary and the Czech Republic have been able to earn higher income from privatization than Poland. But it does not explain, why in the first three years revenues in the Czech Republic were higher than in Hungary. Considering the amounts of foreign direct investment as an indicator for openness of a country for foreigners also does not verify the hypothesis that the high proceeds in the Czech Republic result from massive foreign participation: The cumulated foreign investments for the period from 1989 to 1996 show that Hungary's share was by far the largest with 1288 US \$ per capita, followed by Poland with 128 US \$ and the Czech Republic with only 118 \$ per capita (EBRD 1997: 12).

Besides enlarging the group of possible new owners stretching the privatization process in time might be another way to solve the problem of too large a supply. Slowing down the privatization process and selling few enterprises at a time might contribute to higher revenues. In Hungary and Poland the privatization proceeded slower than it was originally planned³. In Poland the privatization was and still is subject of permanent political struggles which often lead to delays. In the course of these debates the enterprises lost in value and insiders were enabled to strengthen their position which slowed the privatization process further down (Rapacki 1995). This slowdown due to political debates did not lead to higher revenues. In Hungary the situation was similar. Privatization followed a more gradual approach from the very beginning. Single case decisions, in which the aim of high revenues often were very important dominated the process. But privatization was also often slowed down by political intervention. At times a number of large enterprises were not to be privatized at all but assigned to a state holding to stay under state ownership permanently. In other cases the state kept parts of the enterprises or golden shares to assure future state influence. In the course of these decisions the privatization process slowed down so much that a new privatization law was needed to speed up the process again. But uncertainties about the contents of the new law and the course of privatization in the future caused an almost total stop of privatization in 1994 (Major 1994: 116). In Hungary the delays of privatization caused by political interventions into the running privatization programs and the reorientation of the privatization policy did not lead to higher revenues either.

In the Czech Republic it was an aim of the privatization program to transfer large amounts of property as fast as possible and therefore tight schedules were established. In a relatively short period more than 3000 enterprises were transferred to new owners by different methods. A large amount of shares in enterprises were not immediately privatized but stayed with the Fund of National Property. Through this fund the state holds shares in more than 200 companies and remains the largest and most influential shareholder in the country. After the completion of the second wave of privatization, sales have become the most important method of privatization and the Fund of National

³ In Poland it was planned to finish privatization within five to seven years after the beginning, in Hungary the original aim was to privatize 50% of state assets within three years.

Property keeps selling shares for cash which leads to remarkable revenues (Mejstøik 1994; OECD 1994; Borish and No 1 1996; OECD 1996).

From this follows that a slowdown and prudent sequencing of the privatization can lead to higher revenues from privatization if it is conducted by market compatible instruments but is unlikely to yield higher income if it is due to political queries.

2. Demand Side Explanations

Differences in the revenues from privatization might not only be a result of differences on the supply side but also of differences on the demand side, i. e. of differences in the willingness to pay of potential investors. This willingness to pay depends on how the enterprises are evaluated. While evaluating enterprises is a difficult task even in economic systems that are not going through a period of transition, evaluating enterprises properly under transformation conditions is almost impossible (Ulrich 1995). Usually the value of an enterprise is calculated by the discounted flow of future earnings. Under transformation conditions all the determinants of future earnings like prices, wages, access to foreign markets for goods and capital, governmental regulations or income of the population and resulting ability to buy the products of an enterprise are rapidly changing in unknown directions. Analyzing the influence of these factors on the evaluation of enterprises would exceed the scope of the present paper. Therefore I will focus on some main indicators which should affect any rational investor's decision: Growth, inflation, unit labor costs and labor productivity.

Table 7. Growth, Inflation, Labor Unit Costs and Labor Productivity in Poland, Czech Republic and Hungary 1991-1995

Year	1991	1992	1993	1994	1995
Growthrate (% annual change of GDP)					
Poland	-7,0	2,6	3,8	5,2	7,0
Czech Republic	-14,2	-6,4	-0,9	2,6	4,8
Hungary	-11,9	-3,0	-0,8	2,9	2,0
Inflation ^a (% annual change of consumer goods prices)					
Poland	70,3	43,0	35,3	32,2	27,8
Czech Republic	56,7	11,1	20,8	10,0	9,1
Hungary	35,0	23,0	22,5	18,7	28,2
Unit Labor Costs ^b (% annual change in US\$)					
Poland	66,5	-8,7	-8,8	-7,3	15,1
Czech Republic	-14,8	32,8	25,8	13,2	6,9
Hungary	29,4	7,6	-9,6	-1,0	-8,7
Labor Productivity ^c (% annual change)					
Poland	-11,9	17,1	14,5	19,2	9,6
Czech Republic	-16,6	-7,6	-3,5	4,0	20,5
Hungary	-17,9	10,7	18,5	7,3	11,2

Sources: ^a BMWi 1996, ^b EBRD 1996

The conditions for investment determined by these four factors have developed quite differently in the countries analyzed here. Surprisingly the conditions were most advantageous in Poland. It was the first country to return to the path of growth. Increasing growth rates have a positive influence on investor's expectations about future development of aggregate demand. The steady decline of the inflation rate contributes to a further stabilization of expectations, while declining unit labor costs and rising labor productivity are indicators for growing competitiveness.

The comparatively better results in terms of privatization revenues in Hungary and the Czech Republic cannot be explained by the indicators considered here. The two countries merely performed better in lowering the inflation rate. Growth rates were negative until 1993. Especially the good privatization results of the Czech Republic cannot be explained by better conditions for investment influenced by labor productivity or unit labor costs either: Steadily growing labor costs and declining productivity are not factors likely to attract investors and increase their willingness to pay for enterprises to be privatized. The similar trend in the development of labor productivity and labor costs in Hungary and Poland also does not suffice to explain the gap in revenues between these two countries. Consequently from the analysis of these macroeconomic figures no further insight into the paradox of revenues is gained. On the contrary: In the country in which the considered indicators developed best, the lowest revenues were earned and vice versa.

Expected pay-off from an investment is not only determined by economic data but also by the risk associated with a particular investment. It is well known that political risk has a substantial influence on investment decisions. If an investor feels that his investment might not be very safe, it is most likely that he will only pay a low price. In the Czech Republic the political risk especially concerning property rights reforms was rather low. The introduction of a restitution program can be seen as a clear commitment to the guarantee of property rights. There was only one government in charge of the whole privatization program which was introduced and executed at a high speed. Deadlines within the program were usually met. Giving property rights to a large part of the population in the mass privatization program was an additional instrument to prevent future governments from reversing privatization. All these features of the Czech privatization program lowered the risk associated with an investment and therefore contributed to higher revenues. In Hungary the situation was similar. Hungary had a longer tradition of reforms than the other countries. It had been more open and market oriented for quite a while and the main course of privatization and liberalization was never questioned. The high foreign direct investments that flowed into the country are a proof of the good reputation Hungary enjoyed among investors. The low revenues in 1994 should not be associated with higher political risks in that period but with confusions stemming from a reorientation of privatization policy during that time.

Again in Poland the situation was different. Especially during the early transition period there was a lot of political unrest and the government changed several times. Often the new government was in favor of a different privatization policy than the preceding one. Privatization increasingly became a subject of political debates and conflicts. A process most likely to scare off possible investors and lowering their willingness to pay. Another factor with negative effect on the value of an enterprise is the dilution of property rights by influential employees and unions. As discussed above, in Poland the influence of this group has been traditionally strong which seems to have contributed to the low privatization revenues.

From the analysis of demand side factors for the explanation of the paradox of revenues follows that political stability and the general direction of privatization policy and economic reforms in transition countries have a stronger influence on possible privatization revenues than “hard“ economic facts.

3. The Institutional Design

Prices are the result of supply and demand. Some factors influencing supply and demand for enterprises were analyzed in the previous sections. But in a world with positive transaction costs and incomplete knowledge institutional and organizational factors have a substantial influence on prices. Therefore the specific market conditions underlying privatization in the three countries have to be considered when revenues are compared. I shall now turn to the question of which factors of the institutional design of privatization programs have a positive influence on revenues.

In general it can be stated that revenues will be high if an enterprise is sold to the investor who is willing to pay the most and, if at the same time there is a mechanism forcing the buyer to reveal his preferences, i. e. his willingness to pay. Theoretically it can be shown that a competitive approach is able to solve both problems. In the first place competition among buyers is a good mechanism to reveal important information spread among many individuals (Hayek 1937; Hayek 1969). In the case of privatization two forms of information about the enterprises are important:

- i. Knowledge about the enterprise and its microeconomic surroundings such as the quality of the capital stock, internal organization of production, specific skills of employees, possibilities to restructure the enterprise, or important sources of raw materials. Insiders like managers and employees are most likely to have this kind of knowledge.
- ii. Expert knowledge which is not necessarily tied to the enterprise. What is meant here are modern management skills, knowledge about global markets and competition in specific branches or access to external sources of capital. Insiders are not likely to have this kind of knowledge. But it is probably available for outsiders like internationally experienced managers or foreign investors.

It is specific for the privatization in transition countries that not only potential investors have limited knowledge about the enterprises, but that also the ministries and agencies in charge of privatization have only very limited ideas about what the enterprises they are trying to sell might be worth. Therefore they should be interested in making use of the decentralized knowledge as far as possible. Since this information is spread among many individuals it should be an aim of the privatization agencies to involve as many potential buyers as possible in the privatization process.

If there is competition in the process each potentially interested buyer will try to make use of the knowledge available to him and thereby estimate the value of an enterprise. Since there is always the danger that a competitor is willing to pay a higher price every bidder will reveal his true preferences making it possible for the seller to maximize revenues.

By using competition as a mechanism of discovery two problems are solved at once: A large amount of information is collected and processed so the best use of an enterprise can be found and the potential buyers are forced to reveal their preferences. Of course this mechanism has to be enforced by a high degree of transparency. Transparency of the process can prevent corruption and preferential treatment so that no one can acquire any property rights without paying the equivalent price. From these theoretical considerations the hypothesis can be derived that revenues will be high if the institutional design of the privatization process assures competition and transparency and prevents preferential

treatment of any potential new owner. The mass privatization program in the Czech Republic included these features:

1. Anyone interested in an enterprise had the chance to prepare a privatization project. While insiders had to prepare a project, thereby revealing relevant knowledge, outsiders, including foreigners could prepare a proposition if they were interested. In this way a lot of insider and outsider knowledge was revealed and could be used to derive a decision.
2. The privatization ministries chose among several projects the one that fitted best. This provided an incentive for everyone interested in an enterprise to reveal his knowledge and preferences in order to come up with the most suitable proposition.
3. A division of powers and rights among several levels such as the management of the firm, which had to prepare a project, the Ministry of Privatization which made the decision and the Fund of National Property which was in charge of the actual privatization of assets and the collection of revenues created a system of checks and balances that lead to a high degree of transparency and prevented preferential treatment.

In Hungary competition took place on a smaller scale. Although it was always pointed out that competition plays a vital role in the Hungarian privatization the process can be characterized better as a bargaining approach. In many cases the SPA engaged directly in lengthy negotiations with single investors. Such an approach can lead to lower revenues for several reasons:

1. Important outsider information about the value of an enterprise can get lost if only selected investors are invited to make an offer.
2. During the time consuming bargaining process the enterprises loose in value and the buyer will pay lower prices, the longer the procedure lasts (Major 1994).
3. Case by case bargaining includes the possibility for strategic behavior: If an investor knows that the SPA is willing to sell, it is always an option for him to try to re-negotiate certain terms of a contract, including the price (Schmidt and Schnitzer 1997).

Besides these disadvantages of a case by case privatization the role of the management of Hungarian firms should be mentioned. Managers always have been very influential in the Hungarian privatization. Without the consent of the management hardly any firm could be privatized. This does not necessarily mean lower revenues, because an enterprise will be worth more to an investor if he knows that incumbent managers are willing to cooperate and their specific knowledge can be used as a resource in the future. On the other hand it will not be the management's first aim to maximize sales revenues for the state. It is more likely that managers will be interested in capital increases, new investments, job guarantees, or other side arrangements in contracts that will have a negative influence on the price.

In Poland competition played a very limited role in the privatization process so far. Employees were preferentially treated in all forms of privatization. In many cases they have had the right to initiate the commercialization and privatization by themselves. After

privatization has started employees enjoy special rights to become shareholders in the new enterprise or to buy the assets in case of liquidation. If such preferential treatment is granted to the employees per se, they have no incentive to reveal their true preferences or any insider knowledge they might have about what the enterprise is worth. Therefore the state cannot expect to earn high revenues. At the same time outside investors will be careful with engagements in former state enterprises if they face strong employee councils, because employees are likely to be interested in safe jobs and high wages, rather than profit maximization. A factor which is most likely to lower the willingness to pay of potential investors.

E. Conclusion

It was the aim of this paper to analyze some factors determining privatization revenues in transition countries. Therefore different approaches to privatization were described. A comparison of the privatization programs of Poland, the Czech Republic, and Hungary led to the surprising finding that a mass privatization program involving substantial free transfer of assets does not necessarily mean lower total revenues. If give-aways are combined with the sale of enterprises to core investors or the sale of shares via the stock exchange, as it was the case in the Czech Republic, considerable revenues can be earned. Important factors influencing the level of income from privatization are political and economic stability and the institutional design of the privatization program. A stable environment contributes to a higher evaluation of enterprises due to lower risk thus raising willingness to pay of potential investors. A institutional design providing competition and transparency attracts more investors, raises the amount of information to evaluate enterprises, and prevents corruption and preferential treatment of insiders.

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Mass Privatization Funds – the New Institutional Investors in the East? A Comparative Study of CEE Mass Privatization Schemes*

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1. Introduction: The Process and the Problem

Most authors and policy makers agree on the necessity to carry out large-scale privatization as a main mechanism for private sector development in the countries of Central and Eastern Europe. The implementation of the privatization policy, however, requires making choices with huge economic, political and social implications, such as: how to privatize - by sale or by free distribution; who should be the new owners - the incumbent managers and employees, the general population, or business entities, what should the balance between foreign and domestic buyers be, etc. Each of these alternatives has its relative advantages or disadvantages both from the point of view of general economic theory and of the economic and political reality in individual countries.

Privatization by sale to outside investors has been often hailed as the most attractive policy option. Indeed, it has been the standard method of privatization in the West. Firstly, it results in the most efficient allocation of ownership rights because the new people in control will be those willing to bid the most and will have the highest motivation to exercise their rights (Bolton and Roland, 1992). Thus, the sale of large blocks of shares to selected buyers will provide for the best corporate governance arrangements. Secondly, sales methods bring highest government revenue.

In the context of CEE, however, sales methods reveal substantial problems. The latter are connected with the evaluation of assets in the conditions of underdeveloped capital markets and poor accounting records; with the lack of experience of the institutions involved, and with the time-consuming nature of the procedure. Most important, in all CEECs the value of the objects for sale grossly exceeds the domestic buying potential: the

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levels of domestic capital, accumulated either through savings or private business activities, are insufficient. In addition, in all countries apart from Hungary, the foreign investment inflows are very low. Lastly, popular demands for a share in the industrial property inherited from communism as well as the existence of "vested" property interests on the part of incumbent insiders, raise issues of social justice which prevail in political decision-making over those of economic efficiency.

In view of the disadvantages of standard privatization methods and of the obstacles to their successful application, the novel mechanism of privatization through distribution of assets to the wide population has been proposed (Lewandowski and Szomburg, 1989). Share distribution avoids some of the problems of the lack of pre-privatization capital markets, of proper evaluation, of finding buyers, of time, and of popular legitimacy. As Nuti (1994, p.6). puts it, "mass privatization has been seen as method for implementing instant, irreversible, politically self-supporting, large-scale capitalism"

Indeed, Mass Privatization Schemes (MPS) seem more appropriate to effect a swift and less costly change in ownership titles where the speed of the reform is crucial, as well as where there is a large number of entities for divestment and a small number of buyers. For implementation of those schemes all the countries created a specific kind of institutions – financial intermediaries, often called Privatization Funds (PFs). Although, those very institutions raise a lot of associated problems and its solution comprise the real challenge not only for the success of the mass but the whole privatization programs in the CEE. The PFs' regulation and economic behavior, their present and future development, shortly their economic nature will impose strong influence on the type and character of the market systems, which are created in the CEE countries.

At the early stages of setting out the programs for mass privatization the question seemed to be what kind of institutions are needed. The well-known reluctance of the financial intermediaries to undertake controlling actions in the companies from their portfolio raised questions as that - are PFs going to be involved in the corporate governance? And how should they be motivated for that purpose? Frydman *et al.* (1993) discussed this problem extensively arguing that the new financial intermediaries in the East Europe might be "locked" in the privatized companies by various restrictions on their portfolios. While this concerns have been reflected in designing the privatization schemes as showed below, the other suggestions for further securing the active behavior of the newcomers through their future development as universal banking institutions have not received future elaboration. Instead, some MPS adopted rather opposing possibilities for the future development of those institutions, Bulgarian for instance, allowing them to register as a normal holding companies ruled by the Commercial code. Inspirations for such a development might be found in the suggestions revealed by Blanchard *et al.* (1991) and elsewhere, but no matter, how it is motivated, such mixing of different approaches reasoned by different perceptions on the whole system of privatizing institutions is a source for a lot of concern on the eventual outcome of the process.

If looked more carefully the actual MPS and the privatization funds itself this concern seems even more justified. Large stockholders with extremely dispersed own shareholdings, controlled by various groups of interest, which do not have secured their property rights within the funds; that seems another dimension of the uncertainty associated with the actual PFs' behavior.

This way we believe, that at the current stage of the development of the PFs, the big question is - what kind of institutions we actually have? The task does not seem simple if one tries to differentiate the PFs from all feasible economic agents. This paper tries to challenge just one relation, perhaps the most spread belief, that PFs are type of institutional investors, or mutual funds. Although not giving direct answers, that approach provides some space for speculating on the most important issue concerning the institutions in question, their relevance to the changing corporate governance system in the transforming economies.

Believing that the PFs differentiation could be completed only within the maximum large framework on the whole Mass Privatization Programs we review them extensively in section 2. Bulgarian, Czech, Polish and Romanian schemes are the observed examples. The third section is devoted to the privatization intermediaries themselves and the fourth to their investment strategies. The fifth relates them to the institutional investors in the developed market economies and the sixth concludes.

2. The Schemes

2.1. MPS Within the Context of Overall Privatization

The mass privatization schemes were introduced in the privatization programs in order to tackle the problems of lack of domestic capital, of valuation of assets and underdeveloped capital markets, and of speed. There was also a strong social justification - granting the wide population a share in the industrial property inherited from communism. Each of the countries under consideration, however, placed a different emphasis on the transformation of state ownership through free distribution of vouchers in terms of scope and timing of this privatization method. A variety of reasons such as different socio-political legacy and national consensus for carrying out industrial reform have been identified in the country reports. It is also important to consider the link between the privatization programs and other measures specifically designed for restructuring of enterprises allocated to mass privatization. Where some restructuring was carried out before the transformation of state ownership, mass privatization has some specific characteristics reflected in the institutions of the scheme.

In the Czech republic, voucher privatization was envisaged as one of the methods for large-scale privatization of state-owned enterprises in a coherent programme of 1991. The design implied that any restructuring measures, apart from the commercialization of enterprises, will be left to the new owners. It was the specially created Ministry for Privatization (MP) that had the ultimate choice on the enterprises and the amount of their shares to be included in the voucher programme. Certain decentralized elements existed in defining the scope of the method and its combination with other methods in that the MP decided on the basis of privatization plans submitted by the firm's management, after the approval of the branch minister, as well as by any other interested party such as potential buyers, etc. The Czech contribution states that the several plans were prepared per enterprise, and that managerial plans often took precedence. On the whole, the public authorities in charge had a sufficient idea about the amount of assets they would like to distribute through vouchers. As a result, at about 41% of the firms in the first wave of the large privatization, or 7.5% of the capital assets in the country, had allocated to the voucher programme on average 61.4% of their capital. Nearly 23.3% of the industrial capital was retained at that point by the state Fund of National Property. Unlike the

situation in other CEECs, banks were included in the scheme too, which led to some specific developments as it will be pointed out further below. During the second wave another 861 companies became subject to mass privatization, which established the scheme as a main mechanism for large scale privatization in the Czech Republic.

The Polish large scale privatization demonstrates substantial differences from the Czech one. The debates on the mass privatization started in 1991 as well. The necessary legal basis, however, was passed by the Sejm only in April 1993. The mass privatization programme was adopted as an alternative method to that of privatization through sales, employee and management buy-outs, and liquidations. It was largely called as a reaction to the slowness and some of the problems that the other methods present. Its introduction, however, was delayed because of the opposition of the workers' councils to various sensitive issues, such as the participation of foreigners and others. Also unlike the Czech case, some restructuring was intended to be carried out before the privatization. In such a way any further recombination of the former state property on the free market could be carried out at prices approximate to its real value, notes the Polish contributor. The selection of enterprises to be covered by the programme was completed only in September 1995. These were commercialized enterprises wholly owned by the Ministry for Ownership Transformation (the MOT). Unlike the Czech case, the proposals were made by the Ministry, but the ultimate choice for participation in the programme was left to the enterprises. The MOT invited large companies in a healthy financial position. The firms' management and the employee councils, however, could withdraw within 45 days forwarding a reasoned objection. Also, 25% of the shares of the enterprises in the scheme were to be retained by the state, and 15% were to be distributed to the employees. Eventually, at about 10% of the total state property was included for mass privatization.

Similarly to the above countries, Romania started early preparations for carrying out mass privatization. In 1991, a special Law was passed which set up a scheme combining free distribution methods and sales methods. Certain preferential rights for employees were provided too. At about 6280 enterprises were commercialized and their shares were designated for divestment through both methods in proportion 70% for sales or retention by the state and 30% for mass privatization. The institutions entrusted with the ownership of the enterprises were, like in Poland, supposed to carry out some restructuring. However, a certain slowness and dissatisfaction with the scheme were felt among the population. It was only in 1995 that the legislative basis was completed, some of the perceived problems remedied, and new consensus sought for acceleration of the privatization process.

Mass privatization in Bulgaria, like in Poland was applied as a second stage of the privatization policy. The scheme was firstly introduced in the middle of 1994 but it was actually put in motion only in the beginning of 1996. Thus, Bulgaria was the latest to embark on the distribution scheme. Its adoption was largely due to the recognition of the extreme slowness of the sales privatization model in the context of increasing deterioration of the macro- and micro- financial situation of the country, and a number of governmental obligations undertaken in front of the international financial authorities. As the Bulgarian report shows, there was no comprehensive overall privatization strategy adopted, but the mass privatization scheme was rather gradually accommodated within the existing networks of interests of the powerful economic groups, who used their political lobbies. The number of enterprises to be included in the programme, the proportion of

shares to be distributed and to be retained by the state, as well as the parallel application of other privatization methods was decided on an entirely centralized basis by the Council of Ministers. The latter took consideration of a number of criteria, such as strategic position of the enterprise, prospects for "cash" privatization, etc., mostly made in the context of political bargaining behind closed doors. As a result, after numerous corrections to the list, 1050 enterprises with a total capital of 201.85 billion Bulgarian leva (BGL) were included with an average of 42.7% of their capital to be privatized in the first mass privatization round.

2.2. *Forms of Participation in the Mass Privatization Scheme*

An essential element in the design of all mass privatization schemes is the distribution of entitlements to the industrial property included in them to the wide portion of the population. This is exactly the mechanism with which the problems of lack of domestic savings, of solvent domestic core investors and of sufficient and publicly acceptable foreign interest are to be avoided. For that purpose a certain type of security is offered against a token value, which materializes a bundle of rights belonging to its bearer. The contents of this bundle of rights as well as the times and forms of their satisfaction, however, vary from a country to country.

In the Czech Republic vouchers were distributed, which had a nominal value determined in advance at 1000 voucher points. The vouchers entitled their bearers to two main rights: to direct use of the vouchers at auctions in order to acquire enterprise shares, and to indirect use, i.e. investing them in the capital of privatization intermediaries specially created to acquire and manage enterprise shares on portfolio principles. The choice between the two forms of participation is completely decentralized and depends on the will of the individual participants as well as on the marketing abilities of the intermediaries. In practice, the indirect participation was the preferred way: at about 72% of all voucher points were placed with the Investment Privatization Funds (the IPFs). During the second wave there is a reduction in this trend, only 64% of the voucher points were attracted by IPFs, by the indirect participation still remains significant. The Slovak experience shows similar results; according to the Slovak report about 74% of the points were used indirectly.

Bulgaria opted for a similar scheme, distributing investment vouchers with a nominal value of 1 investment BGL, equal to 1 BGL of the offered stock. The vouchers could be used in a direct or in an indirect way too. The latter was predominant, and the Privatization Funds (the PFs) accounted for four times more vouchers than those in individual participants.

Poland and Romania, however, went for quite a different approach. In Poland participation certificates (PCs) were distributed to the population. They, however, do not possess a nominal value and do not entitle their bearers to any form of direct ownership of the enterprises included in the scheme. The ownership of the enterprises was allocated between a number of state created National Investment Funds (NIFs), which represented the first stage of the mass privatization programme. The PCs were received only after November 1995. Their bearers could, firstly, exchange them for an equal number of shares in each of the NIFs after the admission of their shares to trading by the stock-exchange, i.e. 1 PC for 1 share of each of the 15 NIFs, by the intermediary of brokerage houses in the National Depository of Securities. After that, the share certificate holders

will become bearers to all the rights vested in the share holders of joint-stock companies. The PCs also materialized the right to obtain dividends, liquidation proceeds and interest corresponding to the shares of funds. As the Polish report underlines, at the time, the holders of share certificates do not possess any corporation rights in relation to the funds, which are owned by the State Treasury. In addition, the rights in question are of a temporary character and if not exchanged for funds' shares within a given period, they will expire. Secondly, the share certificate holder could freely sell for cash it before carrying out the above mentioned exchange at a price settled by the market. In such away, a concentration of the ownership of funds becomes possible.

The Romanian approach resembled the Polish one but also evolved with time to include more market elements. Ownership certificates (OCs) were distributed to the population by the end of 1992. The OCs had no nominal value, but represented 5 units of stock for each of the Private Ownership Funds (POFs) created to hold the 30% of enterprise shares designated for mass privatization. Thus, direct participation of citizens in mass privatization, in the way it was possible in Bulgaria and the Czech Republic, was excluded. Each citizen immediately became a stakeholder in the five POFs. Because of the character of Romanian privatization combining several methods, the OCs are much more multipurpose than the privatization securities in other countries. The OCs could be sold through the stock exchange or directly to another party. They could be exchanged at a market price for the shares of a certain commercial company. The Law, however, limits this right to exchanging only the OCs in a POF for the shares of enterprises in its 30% portfolio. The OC also entitle their bearers to 10% discount if they decide to use them for purchase of shares of companies offered to the public by the State Owned Fund. If the OCs holder decides to keep them, naturally, they will entitle him to receive dividends from the POFs and to exercise certain shareholders' rights with regard to them.

The most emphasized right of the POFs' shareholders was the opportunity to receive dividends. Since, this was not the case for three years many people exchanged them for cash and a concentration of OC in private hands appeared. At the same time the OC were not exchanged for company's stock by POFs for a long time.

Those peculiarities of the process were considered unsatisfying and with the 1995 Law, the scheme was changed essentially. They were issued privatization vouchers with the nominal value (975 000 Lei for 1 voucher), called accordingly Nominal Coupons (NC), added to the old '*unnominal*' OCs. The latter were also given a nominal value to the new scheme a specific value was given to a stock of OCs based on their transaction value at the unorganized market (25 000 lei each). This time, the nominal vouchers based on their transaction value at the unorganized market (25 000 lei each). This time, the nominal vouchers entitled their bearer to use them under certain conditions in exchange of shares of a large number of commercial companies. At the same time, a list of about 4000 companies was launched, which allowed a direct conversion of certificates for shares, resembling much the process in Czech Republic and Bulgaria.

3. The Privatization Intermediaries

As mentioned, all the schemes are based on the special kind of privatization intermediaries. Although, there essential differences in their concepts among the countries, in the regulation of the formation, longevity, organization and functioning of these institutions. Those differences are an outstanding proof for the specific problems

encountered by their designers. They witness as for the extent the government bodies in the different countries recognize the problem of the eventual behavior of privatization intermediaries as well as their abilities to manage that behavior. In final account those very differences will determine the eventual success or failure of the proposed mass privatization schemes.

3.1.1. Formation

Certain prognoses have been made in the literature that central organization of funds is more likely to contribute to their political dependency and bureaucratization. On the contrary, where PIs are formed by free entrants on a competitive basis, there is more scope for entrepreneurship rather than for subsidization (Frydman *at al.* (1993)). Indeed, one of the most striking differences in the regulation of privatization intermediaries refers to the system of their formation, and mainly, to the extent and the forms of the participation of the state in the process, as well as the extent of private initiative allowed.

In Poland and Romania, the state created the funds, and provided for all the elements of the organizational and patrimonial structure needed for their existence. Thus, in Poland, the NIFs were founded as one- man joint-stock companies by the Ministry for Ownership Transformation. During the first stage of the programme, it was to be their sole shareholder. As the country report clarifies, the State Treasury deposits the initial capital of the NIFs in the form of the non-monetary contribution - the commercialized companies wholly owned by it. The deposit was based on a special procedure for the calculation of the values of the enterprise shares. During the second stage of the programme, the NIFs are to be privatized and to function as a joint-stock company with shares listed on the stock exchange.

In Romania, the state established two types of funds: a State Owned Fund (SOF) and five Privately Owned Funds (POFs). The POFs were organized as joint-stock companies. A time period of five years was envisaged for their existence, after which they were to be transformed into mutual funds. The government, under the approval of the Parliament unlike the Polish case, is responsible for the formation of the portfolio and the organs of the state as well as the private funds.

Therefore, in these countries the principle of formation of PIs provides for a closer and more permanent link with the Executive, under the control of Parliament in Romania. It also allows the creation of institutions with relatively equal sizes, organizational and patrimonial conditions, as well as founding interests during the first stages of their existence.

It has to be noted that major changes were introduced in the regulation of the Romanian POFs with a special Law #133/1 of November 1996. The latter provides for the transformation of the POFs in financial investment societies(FIS) which will present the features of a standard public company limited by shares.

In the Czech Republic and Bulgaria, the participation of the state in the formation of privatization intermediaries was largely limited. Private agents, founders, were left the initiative to freely establish special joint-stock companies after obtaining a license from a designated governmental agency upon the satisfaction of a certain number of legislative requirements. Thus, in both countries the state retained a controlling role in the process. Nonetheless, a certain difference between the two states can be observed.

In the Czech Republic, it was the Ministry of Finance that performed that role. In Bulgaria, the state agency created in order to supervise the issue and trade with securities, and the formation and functioning of investment companies and investment intermediaries, the Commission of Securities and Stock Exchange (the CSSE), was the organ to license the privatization funds. The members of the CSSE are appointed by the Council of Ministers acting on the proposal of the Minister of Finance. This provided for a more coherent link between the regime and the requirements for founding an investment company and a privatization fund. The private persons entitled to set up IPFs were to be legal persons. In the Czech Republic and Bulgaria the parties entitled to set up an IPF had to be legal as well as physical persons. In Bulgaria, however, the legal persons who are eligible to form a PF must be with less than 50% state participation in them, with the exception of banking and insurance institutions. Foreign financial institutions satisfying certain conditions can also set up funds. The minimum legislative requirements for licensing in both countries bear certain similarities. The Czech founders had to submit to the Ministry investment plan, managerial contract with the IPF, proof of the minimum capital subscribed and paid in by them, and a contract with a depository banking institution. In Bulgaria, they had to prepare an issuance prospectus, outlining the investment strategy of the PF, to be approved by the Commission. They also had to show a proof of the investment of the initial founders' capital, in cash or state securities, sufficient information on the founders' identity, and a contract with a depository bank. There is a specific legislative requirement in the Bulgarian case about the structure of the minimum capital, no less than 70% of it, has to be raised through attracting the investment vouchers of the population.

The Czech Ministry of Finance, according to the observers, adopted a largely laissez-faire attitude to granting the licenses. The procedure amounted to a simple registration. In fact, no requirements to the professional qualifications of founders, for example, have been enforced as a practical matter, and no application satisfying the basic requirements was rejected. The Ministry acted mostly on a *post factum* basis trying to regulate the behavior of funds during the advertising campaign, such as requiring the disclosure of financial promises and costs made for attraction of vouchers in order to monitor the maintenance of a sufficient degree of liquidity. Despite of some threats, however, no licenses have been revoked. (Coffée, 1996)

The Bulgarian CSSE granted licenses for acting as a privatization fund only after the founding general meeting of all shareholders, established the amount of capital subscribed, elected the managerial bodies, and decided on the formation of the PF. It played a substantial role in regulating the behavior of PFs during the advertising campaign, using its right to impose fines on almost all funds. It is a popular opinion that the CSSE exercised a stricter control on the PFs at all stages of their formation than the Czech Ministry of Finance, and that the licensing procedure was complicated and a cumbersome one. Court registration was also mandatory in both countries for completion of the founding procedure of the privatization funds. A specific provision in the Bulgarian legislation allows the funds to transform themselves into investment companies or holding companies 6 months after the last auction.

It is possible to see that such a decentralized form of formation of funds is to be responsible for characteristics very different from those of the Polish and Romanian PIs. The new intermediaries will have differing sizes and more dispersed ownership structure

at least in the initial period, which will have implications for their internal governance and control. There will be also differing leading private interests behind them. In Bulgaria 81 funds were formed ranging from PFs with a nearly the minimum required capital to "giants" accumulating a very large amount of investment vouchers. In fact, the 11 largest PFs have in total nearly 25% more capital than the total capital of the remaining 70 PFs. In the Czech Republic the proliferation of PFs was even greater: 429 IPFs during the first wave and 349 IPFs during the second one. During the first wave, the disproportionate concentration of vouchers in the largest funds was the case in the Czech Republic like the situation in Bulgaria. The second wave, however, demonstrates a significant mitigation of that trend.

It becomes very clear from the Bulgarian contribution that the varieties between funds in terms of investment strategy and ownership behavior are likely to follow the varieties of dominant founders' interests. It is possible to distinguish six differing groups of funds according to their dominant founders. Among them there are state controlled financial institutions and private financial institutions, as it was in the Czech case. There were, however, also private industry-based companies as well as private financial-economic groups with more or less complex economic activities. Most specifically, there are number of PFs dominated by "insiders", i.e. legal entities dominated by managers of companies under privatization or by public officials closely connected with them.

In the context of the Czech Republic a similar issue has been raised too. Two main types of funds were identified: those founded by investment companies, wholly owned by the country's largest banks, and "independent" private ones. Such founders clearly have a totally different incentive structure, and thus are likely to impose different behavior to the IPFs they manage. Thus, the first group of funds could be influenced by the specific interests of the financial institutions they are affiliated to, and might seek to maximize the bank-lending opportunities for their parents instead of the profits for all shareholders. Further on, there are objective conditions for wider heterogeneity, and sometimes real conflicts, of interests between the shareholders of a single intermediary, because of the difference in the types of the stakes invested, the risks born, and the position during the promotion and the advertising campaign. The great disparities within a fund call for the adoption of special rules for protection of minority shareholders if the "mass" character of the scheme is to be preserved.

3.1.2. Explicit Corporate Governance Provisions

The mass privatization programs in the CEECs also differ with respect to extent to which they envisage in advance a particular corporate governance structure of the enterprises included in them. In the way the privatization intermediaries in all countries have been created may be find some provisions designed with the specific purpose of affecting the ownership structures in the country.

One of the examples is Poland where the Law determines ex ante the distribution of control rights of the enterprises. Therefore, the Polish legislators place a stronger emphasis on the value of the "lead" fund in the newly privatized companies. The NIFs can not also acquire more than 33% of the shares of any company, with certain exceptions. There are certain restrictions, to the amounts that the NIFs can sell for a period of three years, on the grounds of maintaining a certain standard of corporate governance of the companies. Thus, where a fund owns more than 20% of the share capital of the company

and is at the same time its largest shareholder, it can not sell if its holding would fall under 20% unless it introduces the company to the market or finds another strategic investor for the company.

The Romanian scheme in its initial phase also provided for a strict distribution of control rights. That distribution, as it was indicated earlier on, was in the proportion of 70% held by the SOF, and 30% - by the 5 POFs. Later, it allowed privatization through voucher conversion up to 60% for not strategic companies and up to 49% for the strategic ones. There is procedure for setting up the packages between the SOF and POFs but it is not clear how the new regulation will match the previous one.

The Czech and the Bulgarian schemes differ from the above approach. The funds acquire packages on the competitive base and distribute between themselves the control rights according to the acquired stakes. Both countries have the maximum level for a single shareholding. These are 20 and 34% of the capital of any single company respectively for the Czech and Bulgarian PIs. Such a rule clearly aims at avoiding excessive concentration and domination of a single fund over the enterprises. The Bulgarian scheme avoids the above problem by raising the threshold to 34% of the capital of the companies included in it.

Bulgarian MPS has another important provision: PIs are free to decide how to develop further and they may register as a holding company or as an investment intermediary, both ruled by the relevant general legal frameworks.

3.1.3. Regulation on Investment Activity

Various aspects of the specific regulation of PIs which influence their role as corporate governance actors have been raised in the debates. Firstly, concerning the degree of diversification and concentration of funds' portfolios allowed. On the one hand, diversification is necessary for the financial stability of the financial intermediary. On the other hand, excessive liquidity and diversification will represent a disincentive for corporate activism. Secondly, the functions that the PIs are allowed to perform with regard to their portfolio companies will also influence their incentives. Thus, Frydman *et al.* (1993) argue that allowing the PIs to hold equity as well as debt claims and to perform other financial services will increase their monitoring leverage. Other scholars, however, object to the development of PIs in the direction of the German universal banking institutions pointing at the conflict of interest such a system leads to and to the danger of creating too powerful institutions.

In Poland, as it was underlined in the beginning, carrying out restructuring of the enterprises was embedded in the programme. Therefore, the main task of the NIFs before their privatization was to manage the shares of enterprises in their portfolio in a way to enhance their value "in particular for the purpose of improving the management of the companies in which the Fund has a substantial shareholding, including the strengthening of their position in the market and obtaining new technologies and loans for the companies" (Art. 4 the Law of NIFs of April 30, 1993). Secondly, the NIFs can purchase and sell the shares of their portfolio companies.

The third right of the fund sharply distinguishes it from the comparable institutions in the other CEECs. The NIFs can obtain as well as grant loans for the accomplishment of the above tasks. The maximum amount which the NIF can borrow, or raise through issuance

of debt securities, is limited to 50% of the net value of the Fund. The NIFs can also trade with state securities and securities issued by other companies. There are, however, certain restrictions imposed on their investment activities imposed by the Law for reasons of reducing the levels of risk, preventing excessive dispersion of shares, and protecting the interests of the Polish state and shareholders. Thus, the NIFs can not participate in general partnerships or other entities as unlimited liability partners, they can not sell securities that they do not own at the time of making the agreement, etc. They can possess shares of other companies as long as they are issued by entities having their seats in Poland or primarily engaged in business there, and state securities. At any case, the fund can not hold more than 25% of its net asset value in securities of one issuer. If the issuer is another fund, then, the restriction is greater: the maximum amount should not represent more than 5% of the net asset value of the fund. The NIFs can also invest up to 5% of their assets in immovable property.

The Bulgarian PFs have also the primary task of acquisition and management of shares of enterprises included in the mass privatization programme. There are restrictions to the ability of the PFs to sell these shares within a period of 6 months after the end of the final auction round.

The PFs can invest in shares of other issuers too. No restrictions with regard to the nationality exist, as it is in the Polish case. The Law, however, requires that the securities issued are traded on the stock exchange. Such an investment can represent much smaller part of the PFs' capital compared to the Polish funds - only 10 %, which also should not be more than 10% of the capital of one issuer. State securities represent an exception and can account for 25% of the fund's capital. There is no specific limit to the part of the assets that can be invested in real property. The only qualification in the Law is that it has to correspond to the needs of the PF.

The borrowing ability of the PFs are more limited than these of their Polish counterparts. The PFs can borrow with a specific purpose - purchase of long-term assets, or short-term loans. That is possible only with the permission of the CSSE, and should not represent more than 10%, or 15% in both cases, of the net capital of the fund. The PF can not give loans, issue bonds. The PFs can not act as an investment intermediary, engage in brokerage, as well as carry out some other activities potentially increasing the amounts of risk.

The Czech funds have a more scarce and liberal regulation with regard to their investment activities. The only provision refers to prohibition of the IPFs to invest more than 10% of their capital in any one security, which must not be more than 20% of the capital of one single issuer. Like the Bulgarian PFs, they can not give loans or issue bonds. An issue of a specific importance in the Czech case represents the requirement that Funds established by a bank or an insurance bank are not allowed to purchase the shares of that bank. The rule clearly aims at prohibition of cross-ownership in a process where enterprises as well as banks are offered for sale. As it will be seen further down, however, this provision has been interpreted in practice in the narrowest possible sense.

Thus, it can be seen that it is the Czech regulators to have chosen to create well-diversified financial intermediaries by requiring them to have at least 10 companies in their portfolios. On the other hand, the creation of such a diffuse portfolio creates many practical obstacles as it will be discussed below.

3.1.4. Internal Governance

The internal governance of the privatization intermediaries and their managerial systems are largely determined by their legal type and the mechanisms for their formation. Several issues will be identified here, namely the rules and criteria for selection of fund managers, the principles of formation of the compensation package, and the types of control and supervision over the activities of the managerial organs. Additional issues, relevant in a specific ways both in the cases of centralized and decentralized formation, can be raised regarding the interests represented by the managing bodies of the PIs.

Management bodies

The Polish scheme pays a particular attention to the quality of the management of the assets of the NIFs. Following closely the provisions of the Polish Commercial Code on joint-stock companies, the privatization intermediaries are to have a two-tier managerial structure. Until the exchange of privatization certificates for shares of the NIFs, the Ministry of State Treasury as a representative of the sole owner of the capital, will perform the functions of the general meeting of shareholders. In view of the potential for political interference, however, the Law envisages that all but the exclusive powers of the general meeting of will be carried out by the Supervisory Board. There are also special rules designed to ensure a more passive role of the state until its participation is reduced to 75%.

The Ministry of State Treasury with the consent of the President of the Council of Ministers appoints for a period of maximum three years the Supervisory Board of the NIFs. Its right of selection is, however, limited in advance in terms of its choice of nominees. According to the scheme, a special Selection Commission, which will function until the privatization of the NIFs, is created to select the candidates. It consists of representatives of the Prime Minister, the Sejm, and the Trade. The Commission is guided by preliminary defined, strict criteria in the selection of the members of the boards, such as: minimum age (30 years), high education in specific subjects, and professional experience in the country of at least 4 years. 60% of the places in the Supervisory Board are to be reserved for Polish citizens. Another provision states that members of parliament can not take part in the managing organs of the funds as well as in the organs of the portfolio companies if the participation of the fund in it is more than 20%.

As it was pointed out above, the Supervisory Board has wider powers. It controls the activities of the fund and adopts its investment strategy. It has the exclusive competence to approve any transactions at a value higher than 15% of the value of the net assets of the Fund. The Supervisory Board has also the power to appoint the members of the Management Board and hold them accountable. It is entrusted with selecting the outside management of the NIF - the management firm.

The management firms as part of the institutions of the mass privatization scheme in Poland are one of its most interesting aspects. These firms were consortia consisting of Polish commercial banks, and foreign investment banks, consultancies, etc. As such they were expected to bring Western know-how, experience, market contacts. The firms were shortlisted by the Selection Commission by way of tender. After that they had to enter into negotiations with the Supervisory Boards of the NIFs. The Supervisory Board selected the managerial firm and concluded managerial contracts with them on behalf of the fund,

which had to be approved by the Minister. Special tripartite contracts were also concluded between the MOT, the fund and the managerial firm determining the relations between them, as well as on compensation for financial results. The firms, beside the statutory managerial bodies of the NIFs, were entrusted with the management of the assets of the funds. They were also expected to advise the Supervisory Board on the goals and the investment policy of the NIF, as well as to assist the short- and medium-term management of the companies of the "lead" part of the NIFs' portfolio.

As the Polish contribution shows, the managerial firms could in law be granted the power of commercial representation. In practice, the principle of the personal union was applied whereby the members of the managerial firms were elected as members of the Managerial Board of the fund. Therefore, there are two types of overlapping relationships created: a contractual one between the NIF and the firm as a legal person, and a statutory one between the NIF and the physical person representing the firm in the Managerial Board.

The Romanian privatization intermediaries are characterized by one-tier system of management. The selection and appointment of the members of the Supervisory Board of POF is by the government with the approval of the parliament of the country. The Supervisory Board has a president, who is a general manager of the POF. With the amendments introduced in 1996, the situation, however, changes significantly. The POFs are obliged to issue shareholders' certificates to all OC bearers. The new shareholders, then, will be able to assemble and choose the managing organs of the FIS along the principles of the general joint stock companies regulation.

As indicated earlier on, in the Czech Republic, it is the founders who become managers of the IPFs. According to the requirements of the licensing Ministry, however, they have to meet several criteria, namely, to possess appropriate professional qualification and reputation for civic integrity. They also can not occupy at the same time a position as civil officers. Two-tier board system is adopted for the Czech funds as well. The biggest funds were established and managed by the investment companies, specially created and 100% owned by the largest Czech banks. Another characteristic feature specific for the Czech scheme, is the possibility during the second privatization wave to establish or transform IPFs into unit trusts. In fact, out of the 353 IPFs, only 195 remained as joint stock companies. In such a way, voting rights and other internal governance issues were avoided by the founders. They argued that the unit trust form saves on the huge organizational costs of a widely held fund, and provides for a greater efficiency in the management of portfolios. (Coffee, 1996).

The Bulgarian Commercial Code allows a choice between two- and one- tier managerial systems for the privatization funds. The actual system adopted as well as the membership of the organs was practically determined by the founders of the PFs. The legal requirements for the founders were suitable professional qualification, which was left to the CSSE to interpret, and permanent residence in the country. The Bulgarian contribution notes that in the majority of cases, the members suggested by the dominant founders were elected by the general meeting of shareholders without any serious obstructions. It is also possible for the PFs to conclude a managerial contract with an investment intermediary. The organization and the functioning of such an investment intermediary is regulated by the Law on Securities and Stock Exchange. However, engaging as an outside manager of a PF necessitates the satisfaction of several requirements on the capital structure of the

intermediary in order to diminish the risks for the principal. The Law also provides for some essential elements of the managerial contract, such as economic targets and guarantees for their achievement.

Managerial compensation

It is also important to compare the systems of compensation of the managerial organs, which represent a main element of their incentive structure. The lack of sufficient adequate information about the initial value of assets, or of the multiplicity of objectives that the funds will carry out, represent real difficulty for tying up managerial compensation to funds' performance. Nonetheless, most countries have introduced market elements in this respect. In Poland the law regulates the structure as well as the maximum size of the compensation. The remuneration package consists of two parts: an annual fixed management fee and a performance fee, which can be annual or final. The size of performance fee can not be more than 1% of the funds' shares, if it is annual, and more than 0.5% of the funds shares multiplied by the number of years, if it a final pay.

The Czech Republic envisages also the maximum amount of the compensation. It, however, allows for a choice between two systems: maximum of 2% of the value of the funds' shares, or 20% of its annual profit. According to observers, the first system is more common between the funds. In fact, because of the competition between them it is often less than 2%. Some criticisms have been attracted, on the grounds that such a compensation represents a disincentive in expending time, efforts and resources for costly monitoring activities.

The Bulgarian scheme leaves the definition of the structure as well as of the size of the compensation package to be determined by the contracting parties, The only provision in this respect refers to the compensation of an investment intermediary - it can not be more than 5% of the real assets value of the funds balance sheet, including the costs for the management of the fund.

Control over the management: internal and external

In all countries the control of the activities of the managerial organs is conducted primarily by the bodies that have elected them or have contracted with them. These organs can enforce the obligations resulting from the contractual or statutory liabilities of the managers. Where damage has been caused by intentional wrong or gross negligence, tortious liability can be sought according to the general civil procedures, it was pointed out in the Polish report. In most countries, the main sanction for mismanagement is the termination of the contract before its expiry. For example, in Bulgaria, the contract with the investment intermediary could be terminated on the part of the PF at any time, after a short notice, during the first five years of the establishment of the fund. In Poland, the contract can be also terminated without giving any reasons for that with no longer than 180 days notice. If the termination is for reasons beyond the responsibility of the management, the latter is still entitled to maximum a half of the annual fixed management fee. The forms of the external supervision in the individual countries vary also. In Bulgaria, the management of the PFs is required to submit to the Commission six- and twelve-months reports, in which it has to disclose major aspects of its investment policy and transactions. The Commission, on the other hand, is given the right to impose disciplinary measures, such as pecuniary penalties or suspending the trade in certain

securities, as well as the right to intervene for a deposition of member from a governing body. It does not, however, have the right to take back the fund's license.

4. The Investment Strategies of Privatization Intermediaries

The investment strategies of the PIs in the various countries is determined by a multiplicity of factors. An important fact, as it has been noted earlier on is the specific regulation for their formation and functioning, the supply of enterprises and the mechanisms for matching the demand and the supply. In the cases of Bulgaria and the Czech Republic, the particular interests and sets of incentives of founders would play an important part in the differentiation of ownership behavior. The research on the strategies of the PIs is still not sufficient. Certain observations, however, can be made in three directions: portfolio formation; portfolio management and reconfiguration, and performance as corporate monitors.

4.1. Allocation of Privatized Stock and Formation of PFs Portfolio

There are two main mechanisms applied in the CEECs for allocation of enterprise shares to the privatization intermediaries specially created for their management - centralized allocation and decentralized formation of portfolios by way of participation in auctions or tenders.

The Romanian scheme is characterized by centralized allocation between the State Ownership Fund (70% of a company's stock), and the five Private Ownership Funds (30%). The creation of balanced portfolios was intended both in terms of size of performance of companies. Ultimately, the POFs concentrated enterprises of particular industries. The enterprises from the critical industries were divided among the POFs, as the Romanian report notes, for reasons of risk distribution and avoidance of monopoly positions. The enterprises from industries such as agriculture, construction and trade, were allocated according to regional principles.

The Polish mass privatization programme pays a particular attention to the allocation of enterprises to the NIFs portfolios in accordance with the intended ex ante distribution of the control rights over the companies. In such a way, the share portfolio of each fund has two parts - one consists of company shares, which are lead ones, and the other, consisting of minority shares. The lead packages of the NIFs are formed after the funds choose the enterprises they would like to hold, after which lots are drawn for individual funds in the first round and an algorithm is used to determine the sequence of selection in further rounds in order to equalize as much as possible the chances of choice.

According to the programme the 512 companies will have an ownership structure as follows: 33% to be lead shareholding a NIF which has selected the company. This NIF is the main investor of the enterprise and, as it was indicated earlier on, it can reduce its participation during a certain period only under specific conditions. Another 27% are equally distributed between the other 14 funds, each 1.93%, and thus represent their minority shareholdings. As the Polish contribution shows, the portfolio of each fund consists of 33 to 35 lead packages and 477 to 479 minority packages. The State Treasury reserves 25%, and 15% are distributed to the employees of the given company.

In the Czech Republic the voucher conversion was also based on a complicated auction procedure consisting of multiple rounds of bidding. Price setting mechanism was, however, different from the Bulgarian one. In the first round an identical price was set for the shares in all companies. The prices were adjusted between the rounds by a three-member Price Commission in order to meet the changing supply and demand, based on a complex algorithm. Individuals and IPFs, then, had only to determine the quantity they want to obtain in particular companies. After that, special rules were employed for distribution of shares between individuals bidders and IPFs, if the demand for shares did not meet the number of shares available.

The actual development of the Czech funds shows that in many cases the IPFs have to cooperate between themselves in order to come up with a common platform and establish their control over the enterprise, (Lastovicka, Marcincin and Mejstrik, (1994)). According to some authors, however, it imposes a monitoring difficulties and encourages free riding on the part of the owners. In addition, like the Polish scheme, the Bulgarian one grants 10% of the shares to the employees of the enterprise. Both in Bulgaria and the Czech Republic, the state decides on a case to case basis on the amount of shares to retain for itself or to privatize through other methods.

The greatest amount of information on the investment activities of funds concerns exactly their strategies and criteria for portfolio formation. In Poland, the strategies of the NIFs clearly differ with respect to the "lead" and the minority packages in the portfolios. The "lead" part was formed on the basis of economic-financial quantitative criteria, such as value of sales, gross and net profit, profitability of sales and profitability of assets, supplemented by sectoral analysis. Qualitative criteria, such as the state of technological equipment, technologies in use, management, availability of potential strategic investors, were also employed. It is suggested in the Polish contribution that the prevalence of one criterion is uncertain. The branch principle has been applied more clearly by three of the NIFs. It was generally used, however, at later rounds in order complement selections of the same branches already made.

The process of portfolio formation in the Czech Republic meets to a large extent the predictions for a divergence of the type of behavior of IPFs according to the type of founders. The bank-affiliated IPFs created broad portfolios, aiming at undervalued enterprises, with some of the IPFs acquiring shares in up to 500 companies. Several reasons were advanced for such a strategy ranging from widespread buying in order to reduce the risk of retaining unused vouchers, portfolio risk diversification, desire to extend their banking business to more clients, to mere incompetence and lack of appropriate financial qualifications. (Coffee, 1996). The privately sponsored funds, on the contrary, created small, carefully assembled portfolios, seeking the maximum stake of 20% allowed by the law. [cross-ownership]

In Bulgaria the mechanism for formation of PFs' portfolios, and the mechanism for voucher conversion in general, is completely decentralized. As the Bulgarian report points out, the process is characterized by competitiveness, i.e. each participant bids stating the price and the quantities of shares desired by it, and by acceptability, i.e. an auction commission sets a minimal prices for the shares of each enterprise. The minimal prices are calculated on the basis of the nominal capital at the time of the court registration, corrected with the loss accumulated during the past periods of the company's operation.

The orders, then, are satisfied in a descending order. If there is still stock unsold, it will be distributed proportionally between the bidders, provided it does not exceed a certain amount. Clearly, such a mechanism requires adequate information about the real price of the targeted enterprises, and the adoption of appropriate auction strategies.

The Bulgarian PFs as well had to formulate their strategies in a clearer way than their Polish counterparts as a part of the advertising campaign for the attraction of the investment vouchers of the population. The Bulgarian report classifies their intentions for portfolio formation in two respects: strategic one and branch one.

Three types of strategies were distinguished in the investment intentions of the PFs: to attain a strategic, long-term package of shares in the maximum allowed by the law amount, i.e. 34%. The criteria for selection of the enterprises in that part of the portfolio were mostly qualitative, such as availability of a potential buyer or a strategic investor, relation to the founders' business, formation of a closed production cycle, remaining state participation, region, etc. In such enterprises the PFs intend to play an active governance role, to restructure them and increase their profitability in the long run. to attain a medium-term, earnings maximizing package of shares. The targeted enterprises here are such showing stability, good market potential, and a certain economic relation to the first part. to attain some short-term, "for sale" packages. In this group would belong enterprise shares already "contracted" with potential final buyers, as well as shares acquired for risk diversification reasons.

Most of the PFs combine all strategies in various degrees in their portfolios. Nearly half of the PFs, however, have clearer preferences expressed to one particular strategy, and that the strategic one is the most popular. The review shows that the branch criterion has been more important one for the Bulgarian PFs than for the Polish NIFs. The funds have considered the amount of capital to invest in a sector as well as the total number of industries to invest in and the complementarity between them. It can be seen that more funds have chosen to form balanced portfolios, investing in industries with different risk specificity. There are also examples of highly diversified and highly concentrated portfolios, which have chosen by nearly half of the extra large funds. In spite of the fact that there is still not sufficient information due to the later developments in Bulgaria, it is possible to observe some differences in the strategies of the various types of founders as in the case of the Czech Republic. The PFs founded by entities controlled by state enterprise managers and public officials, for example, clearly emphasize their orientation towards concentrated portfolios in particular industries, even particular enterprises. Such a strategy is being advertised also by private founders with a particular business interest in a particular production area. The PFs based on private founders associated with financial structures, on the other hand, aimed at investments maximizing their earnings, with a sufficiently large "for sale" portfolios for risk diversification. The private complex founders demonstrated plans for balanced portfolios combining active involvement in the acquired enterprises and presence in several important branches of the economy. The PFs founded by state financial institutions had the least clear orientation on their strategic goals. Most of them, however, intended a trade orientation.

4.2. Portfolio Management and Reconfiguration

The mechanism of voucher conversion in most countries suggests that some random elements of formation of the portfolios are possible. Therefore, it is an important part of

the portfolio management to restructure the initial acquisitions in order to reflect better the strategies of the organs of the privatization intermediaries.

As it was made clear earlier on, there are some restrictions on the reconfiguration of the "lead" portfolios of Polish NIFs. With regard to the minority packages, the prevailing strategies seem to be that of passivity and free riding on the activities of the "lead" NIFs, because of the non-profitability of any activism. Sales, however, are also common. It has been pointed out that most funds (six) favor strategies of consolidation of the minority packages in interested parties, because the dispersion of minority stakes has a negative effect on the stock exchange notations of companies. Consolidations are also useful to control the entry and exit of companies in the lead portfolios. The NIFs that have followed that strategy have expressed intentions to continue with that strategy through other methods.

On the whole, the outlines of the medium-term ownership strategies of individual NIFs in the companies they lead by the second half of 1996 reveal three types of behavior: a restructuring, a financial investor and a mixed one. The "restructuring" funds are characterized by an active involvement in the enterprises in a variety of forms in an attempt to increase the net assets of the portfolio companies. Such funds finance some of their lead companies by way of sales of minority stakes; loans are granted only to companies with established market position and qualified management; where deeper restructuring is needed, strategic investors are sought in most cases. Such funds intend to follow this strategy for a period up to 5 years. Another group of funds have chosen a purely financial strategy from the very beginning. As the report shows these are mostly funds with highly differentiated lead portfolios. In these cases direct involvement in companies is limited. The strategy is oriented to sales of lead as well as of minority packages. The proceeds are invested mostly in fixed interest assets, i.e. outside the mass privatization programme, and an overall liquidity of the portfolio is preferred. Most of the NIFs, however, reveal mixed strategies with varying combinations between restructuring and financial strategies.

With regard to the Bulgarian funds, it can be pointed out at this stage that the 6-months prohibition of sales of enterprise shares prevents any formal, explicit portfolio restructuring. The PFs are temporarily "locked up" in their portfolios and left with the choice of active behavior or passive free-riding. The analysis of the sizes of the "for sale" portfolios, however, shows that significant changes can be expected. In addition, some PFs, reflecting the interests of their founders, have already expressed their intention to transform themselves either in investment companies or in holding companies.

The research on the Czech IPFs is also still very modest. The general lack of liquid and well developed stock markets, however, clearly prevents the IPFs from active trading. Some off-stock exchange transactions, however, have occurred through informal swaps between funds in pursuits of more concentrated portfolios.

4.3. *Explicit Interest to the Corporate Governance*

It is mainly in the Czech Republic that some research has been carried out on the behavior of IPFs as enterprise owners. There still, however, no definite conclusions can be made. Most IPFs have sought maximum representation in the organs of their portfolio companies, in the Managing Boards where possible. Different strategies in recruitment of directors

importance of incentives of investment companies barriers to active ownership: 20%, lack of ability to provide financing plus technological competence; cross ownership and conflicts of interest.

Bulgarian MPS provides some evidence in that relation. In the immediate period after beginning of the trade privatized companies' securities almost 90% percent of the that deal consisted of so called 'block-trade' – the intensive intra-fund exchange at the previously agreed stock prices, which has strove to create large block or majority holdings. Another remarkable evidence is that almost all of PFs took the advantage provided by the regulation and registered as holding companies indicating this way a further interest in controlling their portfolio enterprises. The media reported as well their active presence on the boards, but there is not still systematic research on that.

5. Privatization Intermediaries - the new Institutional Investors in the East?

5.1. The System of the Institutional Investors

The above review of the MPS in CEE countries evidences some noteworthy features. Regardless, the strong variety among the countries, the PFs in any country are single type and provide a single type stock to the investors in the country. The Czech example makes a little difference, since the change in the legal form of the PFs registered for the second privatization wave changed the status of their investors, but not the services offered to them.

This is rather different from the situation in the market economies when the institutional investors represent a diversified system of different institutions offering a wide range of services.

This is an essential distinction since that means that an investor in mutual fund has a choice between different time horizons for its investments, different extent of their riskness and thus makes his investment specific. None of this is typical for the CEE PFs. Regardless their promises, their actual portfolios are not fully according to their wishes, because of their random or the opposite centralized creation. This way the exact riskness of PFs portfolios is not clear, at least for a while, and that is true also for the prescribed time horizon for an average investment in their securities. Thus, their investors face problems with making their own specific strategy with those kinds of investments. Which means, that the most probable strategy might be the most general one – one-shot game targeted on the expected initial appreciation of the believed undervalued stock.

Polish case here might be an exception, since investors in Polish NIFs may expect more predictable portfolios and this way more predictable behavior. Also, the Polish investors have been given a chance to sale their certificates in advance if wished, so this may be seen as a preliminary selection for those who do not want to make those kind of investment which is offered to them by the MPS. Although, this distinction is not favorable for the Polish PFs identification as institutional investors as well, since this predictability is on the account of their moving away from the mutual fund model and approaching the holding company pattern. But this is another story.

Moreover, and more important, if one consider the institutional investors pyramid in a developed economy, its base consists of pension funds and life insurance companies, i.e. the mass case of investments are typically in largely predictable long-term investments.

And the various investments in the mutual funds and directly in securities are on the tiny top of the pyramid.

Again, the picture of the CEE PFs is adverse one. They keep in their portfolios high-risk stock originating from the companies, which have been never quoted, nor even valued by market standards. And this means that this institutions on average could not offer a good rate of return, even we leave apart the striking cases of abuse of their shareholders. Bulgarian case is strongly supportive with the dividends offered to the small PFs shareholders many times outweighed by the returns, gained by the individual investors; Romanian and Czech evidence is similar.

This way investing in a PF is rather different from investing in a mutual fund from the point of view of the investors expectations and opportunities to gain income.

Let's see now how the CEE PFs' portfolio regulation differs from the institutional investors' one.

5.2. *Their Portfolio Structure*

The portfolios of the Institutional investors are regulated by number of requirements targeted to ensure for diversification of the risk, for warranting the inflows etc. The life insurance companies and pension funds get more and more involved in offering a pure Investment-Oriented Policies. So called guaranteed investment contracts (GIC), often offer a guaranteed interest for a specified period of time. For that purpose their portfolio structures comprised a great deal of debt investments.

Table 1 proves that tendency showing also the important share of the mortgages, government securities, real estate etc.

Table 1

Distribution of assets of U.S. Life Insurance Companies: 1988	
Asset	Percent
Government securities	12.3
Corporate securities	40.8
Of which: Bonds	36.2
Common Stock	3.8
Preferred Stock	0.8
Mortgages	19.6
Real estate	2.3
Policy loans	4.6
Cash	0.4
Short term investments	2.8
All others	17.2

Source: A.M. Best Company, *Best's Reports – Life/Health*, 1988, p. vii. Cited by: Fabozzi and Modigliani, (1992).

Though varying, there are general limits on the investments in the common stock, which are often tightened by the institutional investors' own policy; a leading principle for the British investment and unit trusts is to limit the stake they hold out of each company's stock to 2%, respectively to 3% of the stock traded on the market.

Situation with the CEE PFs is the opposite. They are not only permitted to invest in stock more largely, and even in a single company's stock, (up to 34% in Bulgaria), but they are encouraged to do so. The Polish program takes special measures to guarantee that high concentration of the portfolio's investments, though the procedure of the initial allocation. One may argue that this is favorable to the corporate governance; that might be true but at this point we are interested in the way the PFs differ from the standard institutional investors and not with goals of the mass privatization.

This tendency becomes much stronger after the beginning of the trade with the securities from the PFs portfolios. An active exchange has being established among the funds in order to concentrate further their holdings. Even during the period in which this trade has been prohibited or restricted, as in the first six months in Bulgaria after the auction rounds, there are invented a lot of avoiding mechanisms as preliminary contracts, contracts for management of securities etc., which allowed the process going on.

Thus, the very structure of the PFs does not resemble much that of the institutional investors and does not suggest a similar behavior.

5.3. Liquidity

Another important feature of the institutional investors concerns their liquidity and the liquidity of their assets. It is true that to some point they create liquidity of the stock markets . but it is not less true that they operate in the liquid markets. That means that they operate mostly in securities of the public companies, i.e. companies which are secure in terms that they are not supposed to be withdrawn from the market or restructured as private companies.

The risk of such an action decrease strongly the liquidity of the assets of the mass privatized companies, the risk of the government intervention due to substantial state share in many companies left apart, since the average portfolio investor on the secondary market does not admire the prices of the shares he invest in to depend on the transfer of block-holdings or decisions for conditional rise of the capital etc. This threat might be recognized to some extent by the policy makers and in Bulgaria all the mass privatized companies traded on the stock markets have been registered as public companies, even the smallest, which may be seen as another peculiar feature of the MPS.

Although, even such a severe solution hardly could solve the problem because the liquidity is also function of the performance of the traded company and this could not be resolved by the single act of the transfer of the property.

Later the relatively low dividends (or not at all) paid by the funds and the controversial performance of the companies, they hold stock in, does not promise substantial rates of returns to the potential portfolio investors, and eventually impede the liquidity of the PFs own shares on the markets. In fact there are no noticeable interest in these stock among the investors. Here, it is necessary to distinguish another kind of interests, that of acquiring control over the funds, which seems easy in many cases due to tremendously dispersed ownership of the PFs. Although, this is an interest of large investors which strives to make a 'big stroke' and which final goal is to withdraw a substantial part of the stock from the acting trade, contributing this to the restricted liquidity of the PFs assets.

5.4. Corporate Governance and the Institutional Investors

There are several problems associated with the corporate governance and the institutional investors. The actual problem for their refraining from the deeper involvement in restructuring of the enterprises from their portfolios often drives away the fact that they are operating in a well developed environment of the working corporate governance mechanisms. Regardless what type is the concrete financial system, in most cases the institutional investors of the developed economies are in the position to free-ride, and even if one insist that their passive behavior is due to the restriction imposed on them, that becomes feasible because some other institutions take the leading role.

Just the opposite is the situation with the PFs. They are operating in a system with not clear governance mechanisms, a mixture between still alive bureaucratic intervention of the government and the managers exercising almost unchallenged discretion over the privatized companies. Within such an environment very often the only conceivable active players in a specific company are the PFs, and particularly in the small companies.

This way there is a two-fold reasoning for an active involvement of the CEE PFs – from the one hand this is the strong temptation to rule over a ‘free’ company, where relatively small (and cheap) intervention – just to stop an apparent abuse of the company’s capital by the managers - could improve dramatically the performance and from the other hand impossibility to free-ride on someone’s effort.

Here, we do not touch the problem what forms take this governance and how effective it is, we just emphasize that by it’s very constitution the average Privatization Fund should intervene in the company’s affairs. And that difference the developed institutional investors enters all debates – is that behavior really beneficial for the investors? Why should he invest, even his vouchers, for a such a postponed, and uncertain enterprise, when he has a much more promising alternatives. Even in Polish case the individual may sale its certificates for cash, in accordance with the behavior of the regular small investor. We will return to this problem again in the last section, but what is important by now is that the CEE PFs could not resemble the market economy institutional investors as well.

5.5. The Complex Regulation

Within the developed market economies there is a complex system of regulation of the institutional investors, which scatter the rights and obligations among the government, central bank, self-regulated organizations of the agents on that market and the institutional investors themselves. It ensures high level of consumer protection, and especially that of the small shareholders and predictability of the behavior of the institutions.

This regulatory network makes the investments through this institutions enough specific, secure and differential, i.e. that they do not try to achieve various goals when they make portfolio investments.

In the CEE the regulation of the PFs is almost at its first steps. In most cases the development of such institutions precedes the establishment of the legal framework and this is even the first time of introduction of such an legal perception. The public company concept for instance.

The lack of investment information and the lack of strong protection of the small investors activism not only prevent the large entrance of the small investors, but also prevent their

ability to imply disciplining pressure over the institutions in order to force them complying with the promised (and expected behavior).

This is another strong difference of the CEE PFs from their western counterparts.

6. Conclusions

The analysis of the specific institutions created under the mass privatization in CEE countries showed clearly that they have very little to do with the institutional investors of the developed economies. Their basic features differ strongly from the relevant features of their suspected counterparts. We suppose that they could be better seen as resembling the functions of the large industrial holdings. Considering the one of the main targets of the process itself – establishing the more effective corporate governance, this may be assessed as a positive move. Indeed, there are a number of signs, though still not systematic research, that the PFs show strong interest to involve in active monitoring over the enterprises they hold stock in.

Although, there is a room for some concerns on that development of the PFs. In fact they have been announced to the large public as institutional investors. In the period of attracting the vouchers from the population they emphasized the opportunities to offer an income flow to their clients. The legal form they had also induced such an expectations and behavior among the investors.

As a result the PFs obtained very dispersed ownership structure, with to different groups of shareholders. That of the small investors with property rights claims, but little influence in management of the funds, and that of the founders of the funds, also with relatively small holdings, but with the tremendous impact on the behavior of the funds. This way, in our opinion there is a large space for internal conflicts for the control over the PFs and the increasing wave of attempted take-overs in those CEE countries when the post-privatization trade started, is a supportive evidence of that statement.

This way the existence of the Privatization funds is stuffed with the controversies, which certainly do not support the expectations of the investors, but in our opinion will also impede their functions as holding companies, i.e. will deter the establishment of the active corporate governance as well.

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Enterprise Performance and Corporate Governance

Svetlana Alexandrova

Macroeconomic Situation

Having undergone a deep crisis the last year Bulgarian economy began to recover. The advantages of the one year operation of the currency board system are obvious. The macroeconomic stabilization would remain fragile however without restructure and improvement of enterprise performance. The delay of the structural reform is dangerous for the financial stabilization achieved, so far. The drop in the sales revenues of the industrial sector by 0.7 % in the first half of the year and tight demand are not conducive for the success of the economic reform. Many SOEs have been run with soft budget constraints. "The soft budget constraints are like disease"¹. The Bulgarian economy was a typical example for soft budget constraint whose arise not only from the government but from the financial institutions. The Bulgarian firms were able to borrow huge amounts of money and borrow was losses for them in the future. There is no chance to pay the money back, thus was a burden on the budget and lead to an increase of public debt, and also for its securitization. Some firms are continuing borrow. Interterm borrowing is not overcome yet. Therefore privatization also facilitates the imposition of hard budget constraints on the firms.

Hence, privatization together with overall liberalization and deregulation of the market process, represents the core of the systemic transformation. Transforming the property rights and building the institutions of a private economy necessarily take the time. The Bulgarian case is an example for unstained restructuring reform.

The problem of the Bulgarian economy is the acceleration of the transformation of property rights. Lengthening the privatization process in Bulgaria means to prolong the live of uncertainty for the enterprises which would like to own. Enterprise management is reluctant to make any decisions in such atmosphere and the process of enterprise restructuring is blocked at the onset. It is clear that the short period of uncertainty (caused by fast privatization is better than a long period of uncertainty and hesitation (connected with slow privatization). Slow privatization allows the state to play a role in the enterprise

¹ Joseph E. Stiglitz 1994, Whither Socialism, The MIT Press, p. 217.

management and does not allow perform firms efficiently. The slow process of privatization is the reason why Bulgaria is not considered by the international financial institutions and the EU countries as a advanced country in transition.

The macroeconomic environment influences the enterprise performance more than the quality of management. From an economic point of view it is very difficult to find a connection between the financial result of the companies and the efficiency of the management. The Institute for Market Economics (IME) initiated the last year a research on Bureaucracy in Business. Cluster analysis is used to measure the connection between the efficiency of management and the financial results of the state-owned companies. The cluster analysis is an indirect assessment of the influence of management on the firm's profitability. This cluster analysis comprises 1790 state-owned firms. The firms are classified by the following criteria - financial stability, profitability.

The enterprises are distributed into six clusters. The majority of 73% enterprises are concentrated into the sixth cluster (see table 1).

Table1. Average values of the clusters

	Cluster No. 1	Cluster No. 2	Cluster No. 3	Cluster No. 4	ClusterNo. 5	Cluster No. 6
EBIT	-987.8	-2523.6	19.0	-189.2	-22.0	13.7
Current liquidity	0.8	0.2	0.4	1.1	1.2	1.4
Attract capital/own capital	1.1	0.9	328.9	3.9	3.0	3.3
Numbers of the cases	7.0	2.0	8.0	24.0	448.0	1291.0

Most of the companies have low liquidity, and the influence of macroeconomic environment on firm's efficiency is bigger than the other indicators - management skills, corporate governance and etc. The changes of the macroeconomic environment, particularly the crisis in 1996, made business uncertain. The enterprises' indicators have similar values, Therefore the enterprises have similar behavior (because of the close values of the indicators). The explanation of enterprises' similar behavior is the domination of the state-owned property still and the lack of rational corporate control.

The effect of the state bureaucracy on enterprise behavior and management is very weak. The macroeconomic factors eliminate to some extent the role of the bureaucracy and the managers for efficiency and profitability of the enterprises. The macroeconomic environment is a crucial factor for the firm's profitability. The state-owned companies are faced with strong competition, risk and uncertainty, which still exist in the market. The efficiency of management of the companies could be achieved only through establishing corporate governance, where the new shareholders will have incentives to maximize the profit.

Therefore the property right reform is not isolate from the macroeconomic reform. The macroeconomic stabilization is only supportive. The supportive role should be expressed in stable prices and the imposition of hard budget constrains on the firms, limited government subsidies, and low inflation. The institutional reform allows curb corruption, to limit the role of the bureaucracy. At present the Bulgarian economic reform is its

second stage of the transformation - building an effective financial market, institutional framework and corporate governance. The structural reform allows to sustain the financial stability through improving resource allocation.

Privatization Continues to Be at Center of the Economy

Regardless of the slow privatization, the private sector grew during the last years. The trend of the share of the private sector of the GDP is as follows 1994 - 41.65, 1995 - 48.3%, 1996 - 51.9%, 1997 - 58.8%. The privatization in Bulgaria started in the beginning of 1993. Since then a total of 1102 whole companies and detached units of other 1229 enterprises were sold. The state delegated the rights of the privatization to the branch ministries and the Privatization Agency (authorities as per article 3 of the Privatization Law). The municipalities delegated their privatization rights to regional privatization agency. The central Privatization Agency is responsible for the huge transactions - for companies which long-term assets' value exceed 350 million leva. Since 1993 the Privatization Agency (PA) has contracted 459 deals, out of which 58 with foreign investors. The total revenue of the PA with foreign investors is about 620 million USD, which is a significant part of the foreign investments in Bulgaria for the period 1993-1998 and is 43 % of the total privatization proceeds.

The activity of the privatization authorities shows increasing trend in all the cases. The privatization deals were getting more as the years passed. The situation with the financial effect from the privatization was slightly different. The years with more deals did not necessary bring bigger direct financial effect (cash revenues plus liabilities undertaken).

Total Number of Deals and Financial Effect (million USD) 1993-1998

	Number of deals	Direct financial effect	Investments contracted
1993	62	72.185	58.971
1994	165	232.81	201.738
1995	309	181.919	151.914
1996	515	416.573	170.561
1997	591	607.997	891.346
1998	689	410.772	268.828

A correlation between direct financial effect and investments contracted is observed till 1996 as the latter were twice less on average than the revenues and liabilities undertaken. 1997 showed the only exception of this movement when the investments contracted exceeded the direct financial effect by 283 million USD. This was due mainly to the higher activity of the PA which deals with foreign investors usually brought much more investments contracted than revenues. In 1997 the PA contracted deals that brought 352 million USD as cash revenues and 611 million future investments. The biggest deals with foreign investors - MDK Pirdop, Sodi Devnia and Devnia Cement - accounted for almost half of the direct financial effect of the privatization for the year (285 million USD). By October 1998 there is no sign to see the same picture like in 1997. One reason is that the PA definitely shows that its favorite buyers from now on should be cash payers.

Up to now as a consequence of the first wave of mass privatization and large -scale of privatization the value added of the industry sector increased from 24% - 1996 to 42.68% - 1997. The private sector is concentrated in agriculture, services, wholesale trade and construction. As a result of mass and cash privatization 20% of the fixed asset are privatized. The privatization funds are owners of 10% of the fixed state assets. MEBOs is preferred in privatization and it accounted for 57% of all privatization transactions in 1997. A significant turn in privatization, particularly is a cash privatization, after years of delays. Approximately 2% of the state assets were privatized in the first six months of this year, predominately by the market approach. The target privatization revenues of US \$ 350 million will not be met. The government will reduce them to US \$ 250 million for 1999. By the end of the year 50% of the total assets will be privatized. To meet this targets the government intends to limit MEBO's to smaller enterprises, and to skip secondary considerations such as employment and investment plans which were the most sticky parts of privatization contracts. MEBO's by June 1998 account for 15.6% of all deals. In Bulgaria the government plays a key role in the privatization process. The privatization program and the number of the enterprises subject to privatization is approved by the government. The Government institutions monitor and control the privatization process. The public administration and bureaucracy influence on the privatization through their decisions and representatives in the board of directors. The state has not withdrawn entirely from the state owned enterprises and some privatized enterprises.

The success of the company on the market is based upon the difference between the marginal costs and price, The enterprise performance refers to the output, profit and rate of return. There are some factors which determine the enterprise performance - management, corporate governance, organizational structure. Corporate governance is a key determinant of enterprise performance. Every approach to privatization has advantages in terms of corporate governance and control. The success of the company on the market is based upon the difference between the marginal costs and price, The enterprise performance refers to the output, profit and rate of return. There are some factors which determine the enterprise performance - management, corporate governance, organizational structure. Corporate governance is a key determinant of enterprise performance. Every approach to privatization has advantages in terms of corporate governance and control.

Enterprise performance will be improved when corporate governance ensure financial recourses for products innovation and improvement the quality of the products. The owners have different capabilities for improving the enterprise performance. Different types of the private owner - insiders or outsiders brings different capabilities for the future development of the privatized enterprises. Corporate governance depends on the involvement of different interests.

A wide variety of privatization methods have been used in Bulgaria, yielding a range of corporate governance structure. Privatization is not only a change in ownership. Privatization stimulates the flow of capital, technology and develops new skills. The types of corporate governance is identified by the approaches to privatization, by the way the stakes are distributed. The model of corporate governance is emerging now. The privatization program and approaches can be evaluated in terms of the corporate mechanism created. The privatization methods used are auctions, competition, tender

negotiations, MEBOs, sales to lessees. These methods suggest connection with different types of corporate control.

The corporate governance in transitional countries is different from corporate governance of the developed countries. The disadvantages of the transitional countries and Bulgaria particular is the underdeveloped capital market. It is not a source of financing the privatized enterprises. A new element of the privatization process emerged after establishing the Sofia Stock- exchange market and the block trade of company has started. The current law on the security trading and the stock exchange regulations obviously cannot ensure transparent stock trading and enough publicly provided information about the companies. All of this gives us no reason to talk about transparent market of free competition. The scale of the stock market itself permits manipulation by a single person with a laughable amounts of money. Moreover this method for privatization gives prerequisites for corruption on another level, which seems to be left outside of the focus. The intermediaries that executed the public offerings were chosen in a way that could be hardly viewed as competitive. The deals among the privatization funds allow for further dispersion of the property of the privatized enterprises. The block trade help to some privatization funds for concentration their property. The Bulgarian capital market is very small, not accumulate large financial resources, with low liquidity. The new financial agents such as pension funds, insurance companies are not the main players on the stock exchange market. Bulgaria has transformed the public pension system and will create new pension funds (voluntary pension system). The pension funds will have a major impact on the securities market and will play effective role in the corporate governance and control of the firms.

The corporate governance carried out by insiders is a result of the MEBOs, privatization approach. It is an appropriate approach for some countries, where the employees participated in the management and control of the enterprises (like Poland). For example managers and employees of Polish firm have maintained effective control and they made the choice of the privatization approach. The corporate governance problem arises because of unqualified managers in countries in transition. The board of Director are dominated by government officials and they have an influence on the managers. The employees control is ineffective. The self-profit problem is appeared also. Present managers are not independent and they don't bear the financial consequence of their decisions, the board of directors determine the strategic management priorities. The corporate governance by insider meet difficulties with provision of the finance resources. A popular approach of the last year is MEBOs. It preferable by the managers, because of the transaction is paid on installments. This approach is obvious and social unfair and political dividends to the government. Insider ownership is more equitable and under certain condition is more efficient, but not in Bulgaria where the privatization is going on and the ownership structure is not entirely clear. The disadvantage is that insiders are unable to bring new skill and new capital to the company.

The MEBOs is fast privatization approach, stimulates the increase of the competition, and encourage the enter for new firms. MEBO's approach is appropriate for the small or medium enterprises, where are do not need a huge investments.

The positive feature of mass privatization is the distribution of property and the emergence of new owners and financial institutions such as privatization funds some

privatization funds were transformed into public companies(holding), other were approved for financial intermediaries by Securities and Stock Exchange Commission. The mass privatization is approach, here the government give a way or sells low priced vouchers that can be used to purchase shares in companies, there by eliminating the problem of the shortage of the domestic capital. The new owners impose changes in the corporate governance and guarantee the changes of management. It is only possible in the case when the new owner has power, incentive and ability to ensure efficient management. In Bulgaria the voucher privatization does not decide the problems with the shortage of the capital. Also the links between the enterprises and the state are cut. The disadvantages of the voucher privatization in terms of corporate governance is the lack of a strong ownership interest.

The ownership share of shares is widely distributed. This distribution of the shares to many holders conduct for weak corporate governance. The Law on Transformation and privatization of the state and municipal enterprises limit to 34 % of the stakes belong to the privatization funds. The new amendments of the law allows public exchange of shares. The funds used public offering as a tool for concentration of the power into privatized enterprises and for impact on decision- making. The state maintains the stakes of the enterprises, managers, employees (preferential conditions) also maintain the stakes. Hence the conflict of the interest is unavoidable. The state continues to monitor the firm's activity and can choose the buyer of its shares. The practice in Bulgaria shows the advantages of the voucher approach - rapid privatization, creation of new owners and stimulation of market institutions. It is not approach for establishing the efficient management.

Most of the privatized enterprises suffer from lack of resources. The privatization funds have responsibility for monitoring and portfolio management of the enterprises where they are shareholders. The purchase and selling of the shares by some privatization funds is used for funding the enterprises' activity.

Even though the situation in the banking sector at present seems to be quite favorable the problem with credit extension or more precisely the lack of it, is still persistent. Banks are nor willing to credit the real sector because of two reason. The first is twofold - on the one hand, the banking sector has not restored its confidence that the companies can pay their credits back, on the other companies are nor willing to put up with the extremely high collateral and security required by the banks. The requirements of the commercial bank for lending leads to a lack of financial resources and is an obstacle for the development of the private enterprises in the industrial sector.

Public offering is limited by the capacity of the infant stock exchange market. It is work best for the companies with good financial prospects. The profitable enterprises are already listed on the stock exchange market.

The corporate governance by outsider is considered such as most efficient. The outsider ensure growth of the revenues, innovation and improvement of the capital structure of the privatized enterprises and succeed to establish a new efficient type of corporate governance. Some of the transaction with outsiders (negotiation with potential buyers are not transparent) create prerequisite for rent- seeking. There are cases when the insiders of company blocked the transactions.

Direct Investment and Corporate Governance

The expectations for foreign investment growth is not fulfilled. Direct investments for the first half of this year are US \$ 180 million. It is smaller than the same period of the last year US \$ 273 million.

The Bulgarian economy is relied on direct investment for achieving the growth in the real sector and for promoting the export of the competitive products. The forcing the foreign investments is a way for establishing new model of corporate governance close to those of the Western developed countries. Foreign investment contributes to transfer the knowledge, productive methods, and provision of the capital and new technology. The foreign investors organize and manage activities better than the domestic investors. The reason is the possibility for accumulation more money and organize and manage the firm's activity better. It is because of the difference of values, incentives and other business culture. The advantages of the foreign investment for the corporate governance can be summarized in the following way:

- faster production domestic growth
- develop competition and create fast competitive advantages
- efficient corporate governance
- improvement the resource allocation
- innovation the capital structure of the privatized firm
- return of scale

P. Krugman points out that advantages may be created if the investment in one area of economy generate economies of scale in related industries.²

These feature of the foreign investment are particular important for less developed countries. Hence the direct foreign investments has played a major role in the privatization program, but Bulgarian real economy suffered from absence of the foreign investments.

Corporate Governance and Bureaucracy

The bureaucracy issue are connected with contemporary and old -fashion organization structures. It plays a role in management, co-ordination and control the business. The IME initiated a research last year on the Bureaucracy in Business. In the report the conclusions of the measure of the decision making and managers attitude in SOEs enterprises before and after privatization can be summarized.

In the research "bureaucracy" in business is defined as an agent with two features: first, an agent who applies management approaches against market principles in resource allocation; second, the bureaucrats tend to change the rules of the game established by themselves. The bureaucratic approach to the business affairs is closely associated with inefficient resource allocation and unclear rules. Bureaucrats allocate resources according to unclear criteria and in an inefficient way; that both management and privatization of the

² P. Krugman, Towards a Counterrevolution in Development Theory, WorldBank Economic Review, 1992, p. 75.

SOE is a duty of government officials who maximize their utility, i.e. impede structural reforms; that huge state owned sector is the main source of bureaucracy's economic power, and so on.

The efficiency of the firm's organization depends on economic environment, legislation and maturity of the economic and social relations. The bureaucracy of the SOEs is a duty of government officials who maximize their utility, i.e. impede structural reforms, that huge state-owned sector is the main source of bureaucracy's economic power.

Most analysts admit that here, as elsewhere, bureaucratic allocate resources according to unclear criteria aim and in inefficient way.

We measured³ the bureaucracy in business by means of a standardized questionnaire, filled by face to face interviews with managers or executive directors of 117 state owned enterprises (SOEs), public (joint stock companies) and private companies of the questionnaire. The companies in the sample are all state and formerly state companies which during the survey were found as follows: SOEs - 34.4%, in process of privatization (47.9%) or recently privatized (17.7%). The distribution of time of the managers' is the principle measure (indicator) of bureaucracy applied in this research. superiors The managers' time consists of time for consultations with, time for work with institutions, operational management time, deal-digestion time Corporate governance management focuses on manager's relationship with superior institutions and other integral activities of the company.

All bureaucracy measures were structured in the contexts of corporate governance and operational management. In the report the manager's relationships with other integral activities of the company are examined (nevertheless the division is conventional and was made only as attempt to structure results)⁴

Since 1992 most of the enterprises have been transformed into commercial companies under the legal form of one- person owned joint stock companies (where the sole shareholder is the government/ sector al ministries. This procedure is regulated by the Law on SOEs Transformation into commercial Partnerships (1991). This gave them an opportunity to act as a real commercial entities due the fact they were set in same legal regime. The difference stemmed from the execution of the property rights in SOEs. A number of Council of Ministers degrees (267/1992, amended in 1993 and N7/1994 on the enforcement of the property rights on SOEs amended 3 times 1995 and 5 times 1996, and several times 1997).

The later degree stipulates that in both types of SOEs Council of Ministers or the sectoral ministries exercise the owner's rights (Article 9), appointing the majority of the Board Members. From the legal point of view. there is no difference between the private companies and SOEs; in SOEs the government plays the role of the shareholder's general

³ The research was conducted on a representative cluster in 17 regional towns and Sofia. Companies were selected by random procedures from the BULSTAT register. The survey took place in May 1997. This report summarises the first attempt in Bulgaria to measure costs of decision making and managers attitude in SOEs, enterprises being privatised and recently enterprises.

⁴ Potential factors which may initiate bureaucracy 's intervention in time and resource allocation were selected as follows.

- legal privatisation factors, including ownership, privatisation phase, type of superior structures and other.
- size, structure and competitiveness, including organisation factors and other.
- management values, practise and attitudes and other.

meeting. However government representative in the boards found way to maximize their utility through transferring liabilities from enterprises to the budget, Now after privatization the state sell the share to the buyer, who are chose by the state representatives. At present the managers ' remuneration depend on the profit of the enterprises.

The consultation time in economic aspect is used for characterizing transaction costs.

Companies managed by a board of directors need more time on consultations than the other. Working with a Board of directors requires weekly consultations, while managers under other superior structures consult them once or twice per month. Understandably, companies at which owners are represented by the Manager himself need less time for consultations with superiors (twice a month). Alternatively, companies owned by physical persons or private companies report higher time spent on consultations (once a week). Respondents who state that Ministry departments are responsible for the final risk of the companies show higher consultation time.

The legal status of the company is a significant factor, increasing the number of consultations: Ltds consult their owners on a higher number of subjects, compared with Joint stock companies and One person Ltds. Companies owned by the State only or with a more than 50% state property also need more consultations with their owner (the State) than for example companies owned by the local government.

Most of the consultations are devoted to financial management, investments issues and other strategic decisions. Less consultations is necessary for personnel selection and salaries. It is interesting that sales and new clients are more “discussible” than the suppliers.

Organization structure is an important factor for transaction costs. Companies managed by board of directors need more time for decision making than companies where managers present owner or manager is owner. The analysis shows that in the state owned companies the managers in the state owned companies spent more time on decision making than the managers in the private companies. So the state owned enterprises are much more bureaucratic than private ones and transaction costs are higher.

Managers who believe that illegal practices are commonly used for decreasing transactions costs spend more time on institutions. This is particularly valid for illegal practices such as political support, commission in cash, and avoiding taxes. The managers think that existing regulations increase transaction costs with at least 15%. They claim that the most frequent way of increasing the transaction costs is 'commissions in hand'. It seems that the system creates incentives to avoid strict observation of the rules while personal attitudes would rather reject the corruption as such.

Managers confirming that will take part in an auction, even when they do not have enough money instead of using illegal methods. So the illegal practice increases time cost not only for consultations with superiors but for contacts with other institutions as well.

Post-Privatization and Bureaucracy

The research was done by IME again after the first wave of mass privatization with a purpose to reveal the quality of management after privatization and the effect of the management on the firm's profitability. What are the changes.

Most of the managers continues to take decisions after consultations with the main shareholders.

The time for consultations with shareholders and representatives of the state is devoted on the issues related to the capital structure of the enterprises, strategic financial management. The manager thinks that they need more freedom and initiatives when they take decisions. This fact indicates that the managers are not independent

The volume of the work of the staff is not change. The role of the bureaucracy is not change significant and the changes of the property structure does no help for achieving of efficiency of the bureaucracy in regard to management.

The management of the enterprises face with difficulties such as accounting, the lack of markets for the products, changes of the legislation. The assessment of the managers for their skills, knowledge and initiatives is high. The managers are motivated to work hard and take care for the gain of the firms. Criteria for higher motivation are larger degree of freedom in decisions and initiatives, better conditions for work. After privatization there are prerequisite for improvement of management.

The obstacles of the privatized enterprises are financial resources, and high bank's requirements for lending. This structure of the property suggest contradiction of different interests.

The existing legislation allows the representatives of the state to participate into management of the privatized firms. The structure of the property is not clear. After the privatization in some enterprises where the stakes are distributed to many holders the question for efficiency and profitability exist. Some privatized enterprises continue suffering of the lack of the enough financial resources for their innovation and more of them are not competitive. As a whole the business environment is not competitive, the monopoly is dominated and the resources are inefficiently allocated. The relations between managers, superior institutions, and share holders are not very regulated by current legislation.

The corporate governance and management of the firms before and after privatization are different. The changes are due to the changes of the quality of management and corporate governance. The personnel policy and marketing are improved. After privatization there is a trend towards increasing the self-management, and initiatives.

Conclusions

It is rather early to talk about an efficient corporate governance model. Corporate governance type as the developed countries is emerging now. The management of the privatized firms is improved. The problems of the financial statement, competitive of the production are topic one. In Bulgaria the corporate structure of the privatized

enterprises is very mixed. It is in the stage of development. At present it is very difficult to estimate what kind of type of corporate governance is predominated in Bulgaria.

The corporate governance don't lead to improvement the enterprise performance, except enterprises that are privatized by the foreign investors. It is worthy to mention the factors which identify the difference between the corporate governance model in Bulgaria and developed country:

- the infant capital market is not a efficient means for transferring the resources(the equity market is underdeveloped.
- the competition among commercial banks is weak.
- the banks participate very week in the corporate governance of the privatized state enterprises (the bank system is under restructuring).
- the financial intermediaries such as pension funds, insurance companies is emerging now.
- the state bureaucracy influence of the decisions - making of the privatized enterprises. The bureaucracy is still in business, the state ownership is dominated.
- the lack of the foreign investors.

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Ownership Structures and Firm Performance in South Eastern Europe¹

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The study of the relation ownership-firm performance has a long story. In the countries with established market institutions the focus is put more on the importance of the concentration of the ownership and only in some periods on the importance of the form of the ownership for firm performance. In the transition economies, on understandable reasons, very significant is the study of the both groups of problems.

This paper is based on a study of 305 enterprises from the state and private sector in three countries from South Eastern Europe. Questionnaire surveys are made in 105 enterprises in Bulgaria, in 100 enterprises in Romania and 100 in Albania.

The beginning of the paper proves the necessity of the study of a group of indicators for firm performance (quantitative and qualitative, dynamic and static) which will be generated in a general performance index. The second part deals with the structure of the ownership in the economies of the three countries and this of the studied enterprises. Further more the paper studies the influence of the ownership separately on each of the 13 indicators for firm performance for each of the three countries - Bulgaria, Romania and Albania. At the end it analyses the connection of the ownership with the general performance index. The main conclusion, made in the paper, is that it is proved by a definite way that the private enterprises perform much better than the state ones, and the newly created private enterprises show the best indicators for firm performance. The certainty of the conclusions is possible because of the use of general performance index, while using only one of the indicators for firm performance may lead to unclear and opposite conclusions for the character of the studied relation.

1. Methodological Problems

The connection between the ownership and firm performance is indirect. The influence of the ownership is determined by its concentration, by the way of executing the control by the owners upon the managers, by the quality of the strategic and operative management, etc. In the best case the ownership is only one of the factors for a better or worse firm

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performance. The influence of the other factors could be extremely strong in a certain enterprise but to be neutralized in a larger range.

In our study we use the range of 100 enterprises in each country. We also searched similarity between the structure of the enterprises in the excerpt and this of the whole economy from the point of view of the form of ownership, branch distribution, market share and size of the enterprises. The quoted research project studies the connection between each of the mentioned structures with the firm performance. For the purposes of this paper they are mentioned only as a reason representative character of the sample of enterprises.

The studied enterprises are separated into 4 groups - traditional state enterprises (SOE), corporatized state enterprises (CE), privatized enterprises (PRE) and newly created private enterprises (POE). The separation of the state and private enterprises in the transition economies is of key significance and it is important to be studied.

One of the main problems of the study is connected with the indicators for measuring the firm performance. Well-known are the difficulties which can be met in the use in the countries of transition of such indicators as total factor productivity growth, profitability, labor productivity, etc. (EBRD Transitional report 1997). The lack of full information, the often changes in the exchange rate and the high inflation make unreliable the use of some of these value indicators which in more stable developed economies most often are used for measuring the firm performance. In the conditions of transition for countries with unstable and quickly changing macro environment these indicators often are incorrect and their use can lead to contradicted results and conclusions. The transition economies are in a process of dynamic changes of the structures (employment, production, export, age of the capital, etc.) and that is why the use only of value (quantitative) indicators cannot present adequately the firm performance and the results of their restructuring. In many cases the qualitative indicators, presenting the restructuring of the enterprises are basic for the good estimation of the firm performance. That is why they, too, must be taken into consideration.

In order to be ignored such difficulties this study uses different approach.

A great group of indicators are used, so the extremes which in the most cases are a result of incorrectness, could be neutralized. These indicators are the following: dynamics of the sales and employment, state and dynamics of the productivity, state and dynamics of profit/sales and export/sales ratios, share of the equipment at age under 5 years and over 15 years and dynamics of the latter, level of technology and economic position of the enterprises. Used are static, as well as dynamic indicators, because in a certain moment (year) the comparison of the data could be damaged. Also used are quantitative, as well as qualitative indicators, presenting the restructuring.

The next moment is quantitative revealing of different indicators (quantitative and qualitative, static and dynamic) which allows presenting of general index of firm performance. This is made as for the last two indicators are given quantitative estimations, varying between 0 and 5. Further calculated are the relative values of the indicators for firm performance, as for 100 are accepted the results of the best performed group of enterprises.

General performance index is calculated as an arithmetic mean of the relative values of the 13 indicators. It must be understood as a ratio of the firm performance from a certain group to a conditionally best performance made in a certain country in the studied period.

The main purpose of the study is to check whether in the conditions of transition the hypothesis that, the private enterprises perform better than the state ones, and among them the newly created - better than the privatized, and the corporatized - better than the traditional state enterprises, is true.

2. Ownership Structures of the Economies

After the political changes in 1989-90 a quick process of changing the economic structure of the countries from South Eastern Europe began. Most often as a general index is used the share of the private sector in the economy as a whole and by branches. Bulgaria and Romania have close and considerably low indexes while in Albania the share of the private sector is quite bigger.

For Bulgaria and Romania 45-50% of GDP is created in the private sector, 14-16% of the industrial production, about 60% of the construction production and 70-75% of the turnover of the trade. The share of the private sector in GDP of Albania is almost twice bigger (80-85%) and in the industrial production 3-4 times higher (52-56%).

The main reasons for these differences are the weak rates of privatization in the first two countries while in Albania the privatization of the small and medium sized enterprises was executed very fast. For the increased share of the private sector in GDP cooperates also the quick and radical execution of the giving the land to private owners. Common weakness of the three countries is the weak participation of foreign investors in the privatization process.

3. Ownership Structures of Studied Enterprises

The main characteristics of the structure of the ownership of the studied enterprises could be clearly seen in Table 1.

In spite of this what type is (state or private), the ownership in Bulgaria is quite strongly concentrated. Extremely high share (88,6%) of the number of the studied enterprises are owned by 1 to 3 owners. These are all state enterprises and 75,5% of the number of the private enterprises. The data for the state enterprises could be explained with this that in Bulgaria there are no forms for allowing of minority owners, as for instance in Romania, before the privatization of the enterprises. This model was changed with the mass privatization which was carried out after the finishing our study.

The data for the private enterprises to some extent are surprising because it is known that there are fears from dispersing of the ownership in the transition economies in result of the privatization. In our case there is only weak tendency to dispersing which is revealing in the fact that the relative share of the privatized enterprises, owned by 1 to 3 owners (69,6%) is lower than of the private enterprises created "de novo" (80,8%).

Table 1. Share of the Top Five Shareholders (In %)

	Shareholders:				
	1	2	3	4	5
Bulgaria					
SOE	75.00	50.00	-	-	-
CE	100.00	-	-	-	-
PRE	61.82	16.26	3.96	2.99	2.92
POE	70.73	31.15	13.25	4.03	3.63
Romania					
SOE	100.00	-	-	-	-
CE	68.93	23.28	2.04	0.94	0.77
PRE	18.36	7.30	3.14	2.23	1.89
POE	61.65	30.76	15.70	10.30	5.78
Albania					
SOE	100.00	-	-	-	-
CE	100.00	-	-	-	-
PRE	66.43	20.26	11.04	9.76	5.13
POE	95.00	5.00	-	-	-

Interesting are 11% of the number of the enterprises which have more than 5 owners. The share of the first 5 owners does not exceed 50% as in privatized (29,8%) and in the newly created private enterprises (42,9%). In spite of the fact that they own less than half of the assets, their share is average 2,5 times more than the share of the fourth owner in the privatized enterprises and 3 times more in the newly created private enterprises.

The preliminary analysis made on the basis of the initial information shows the following:

First, the concentration of the ownership of the studied enterprises is very high.

Second, in the bigger part of the enterprises - all state and 75% of the private there is absolute concentration revealed in the fact that 1 to 3 owners have 100% of the assets.

Third, in the rest of the enterprises there is high concentration revealed in the fact that the first three owners have less than 30% of the ownership but many times more than the fourth and the next owners.

Data for the other two countries are similar to Bulgaria. The concentration of the studied enterprises in Albania is even higher. The state enterprises in both forms SOE and CE are owned only by the state, and the newly created enterprises as a rule have only one owner and as an exception - two.

As a whole the model of ownership structure in Romania has the same characteristics with one exception - the privatized enterprises. This is the group with most dispersed ownership from the 12 groups of studied enterprises. More detailed examining of the numbers shows that the share of the 2nd owner is sensitively higher than this of the next and this advantage is increased more, if we compare the share of the first three owners with this of every other from the next owners. Therefore in this case we can talk about a relative concentration which could be revealed in the exercising of minority control of the first or the first three owners.

The general conclusion which we can make from the analysis of the ownership structure of the studied enterprises in Bulgaria, Romania and Albania is that there are no cases of dispersed ownership and therefore of managerial control. The differences in the firm performance of the certain groups of enterprises can be provoked rather by the characteristics of the form of ownership than by its concentration.

4. Ownership Structure and Firm Performance

The ownership could influence upon firm performance by its specific characteristics of the different types of ownership (state or private). In the transition economies the specifics are differed by the existence of traditional and corporatized and privatized and newly created private enterprises. It is necessary to check whether the specifics of the types of ownership influence upon firms performance as the private enterprises perform better than the state, corporate - better than traditional and newly created private enterprises - better than recently privatized.

After we suggested the existence of connection between the structure of the ownership and firm performance it is necessary that it should be further concretize by study of the influence of the structure of ownership upon the different indexes for firm performance. In our study we have used the following indexes: sales, profits/sales ratio, export/sales ratio, productivity/sales/employment, age of capital stock and employment. Also used is the self-evaluation of the managers for the level of technology in the enterprises in relation with that of similar enterprises in the developed countries and the economic position of the enterprises in the last years.

a. Sales.

The volume of sales depends mostly on the size of the enterprise, the character of production process and the type of products. The influence of the structure of ownership can be felt only in dynamics for a certain enterprise which changes its structure of ownership or if the different groups of enterprises according to structures of ownership have similar structure according to the size and production technology characteristics of the included enterprises.

Bulgaria. The data for our study show as a whole quite decreased volume of sales for all categories enterprises for the period 1990-1995 which corresponds to the whole condition of the economy in this period. That is why the influence of the ownership can be searched in comparing the indexes for dynamics of the volume of sales of the enterprises with different type of ownership with the average for the country. The data for the newly created private enterprises only show better performance then the average for the country and with quite a difference - 3-4 times compared with the enterprises from the other 3 groups.

Romania. On this index the studied enterprises are divided very clearly in two groups. The newly created private enterprises only show increase in sales in the period 1995/90 while all the other groups show decrease. The differences are quite sensible - 2-3 times increase, resp. decrease compared with the average index.

Albania. The Albanian enterprises show general decrease of sales in the period 1995/94 for all types of enterprises. The privatized enterprises differ from the other groups

showing the smallest percentage of decrease while the other have almost even values which are a little less favorable than the average.

When we compare the data about the three countries we can see that the newly created private enterprises in Bulgaria and Romania performed considerably better than the other groups while in Albania the best performed enterprises are the privatized but with big difference from the other three groups.

b. Employment.

Concerning the connection structure of ownership - employed could be said the things mentioned about the sales. Furthermore in evaluating this connection in dynamics it is necessary to have in mind the inherited overemployment in the state enterprises which is a reason to expect much faster decrease of the number of employed in these enterprises compared with the rest categories. While in POE a part of the too big increase in the number of employees in them is probably due to the fact that in the last years they have had partly employed persons which have not been registered.

Bulgaria. The mentioned specifics once again confirm the difficulties for determining the connection between the ownership and the indexes for performance. In this case the stage of the life circle of the enterprise can weight more. The arrangement is $POE > average > PRE > CE \geq SOE$.

Romania. The data are similar to those in Bulgaria - many times increase of the number of the employed in POE. The other three groups have decrease which is bigger in CE. The arrangement is $POE > average > SOE \geq PRE \geq CE$.

Albania. The arrangement is similar to that in the other countries: $POE > PRE = average > CE > SOE$.

The common between the three countries is the many times increase of the number of the employed in POE. In Bulgaria and Romania the numbers are much bigger than those in Albania but this is natural because the period is shorter (95-94).

c. Productivity.

This is one of the most important indexes for measuring the firm performance. Important are the level of productivity as well as its dynamics.

Bulgaria. The levels of productivity differ quite much between the different enterprises according to the type of ownership. Only POE show higher indexes than the average and the difference compared with the other groups is several times more. The arrangement is $POE > average > PRE = CE > SOE$.

The dynamics of the productivity is also different. In all groups there is decrease in 1995 compared with the level of 1990. The biggest is the decrease in POE and the least is in CE. In the other two groups SOE and PRE this level is close to the average. The groups are arranged in the following order: $CE > SOE = PRE \geq average > POE$.

Considering the two indexes together - the level and the dynamics of the productivity, we can see closing of the levels in the 5 years period despite the fact that these differences still remain big.

Romania. The productivity index for 1995 is the highest for POE and the difference with the other groups is extremely big. The arrangement is $POE > \text{average} > SOE = PRE = CE$.

Totally different is the arrangement concerning the index dynamics of productivity for the period 1995/90: $SOE > CE = PRE = \text{average} > POE$. It means that the delaying groups get closer to POE though in the time of the study the rates are too low to compensate the delay.

Albania. Again POE are the enterprises with the highest productivity though the difference with the other groups is not that big as in Bulgaria and Romania. The arrangement is $POE > PRE = \text{average} > SOE \geq CE$.

For the period 95/94 the productivity has increased only in PRE. In the other three groups there is decrease which is biggest in POE. The arrangement is $PRE > SOE \geq \text{average} \geq CE > POE$.

If we compare the data for the three countries we can point out one common moment - in 1995 POE have had the highest productivity which values are significantly higher than those of the other groups of enterprises.

d. Profit/Sales Ratio.

Bulgaria. In 1995 all categories enterprises - SOE, CE, PRE and POE show positive indexes for profit/sales ratio. But compared with the average data for the whole sample the private enterprises have better indexes than the state ones. If they separate to subgroups the arrangement will be will be the following - $POE > PRE > \text{Average} > CE > SOE$.

More different is the order in which the different groups of enterprises are arranged, if we take the dynamics of the index profit/sales ratio in the period 1990-1995 - $SOE > PRE > POE = \text{Average} > CE$. Most illogical seems the exchange of places of the corporatised and traditional state enterprises (SOE). The enterprises from SOE have extremely low level of the studied index in 1990. Although that profit/sales ratio increases most in SOE for the period 1990-1995, in 1995 it is still ten times lower than this of the other groups.

If we combine the dynamic and statics aspect we will be able to express more exactly the influence of the ownership upon profit/sales ratio. The results are the following: very high result and stable growth (POE), high result and very high growth (PRE), low result and negative growth (CE) and extremely low result and very high growth (SOE). The growth in the last group can be accepted as result more to the low starting level than it is provoked of the type of ownership.

As a whole we can say that the private enterprises are more efficient than the state, the difference between them remains high enough for the whole studied period, but inside the group of private enterprises the difference between POE and PRE decreases and inside the state enterprises - between CE and SOE.

Romania. In 1995 the private enterprises only show profit/sales ratio which is higher than the average while the corporatised state enterprises have significantly lower index than the average. In the other two groups the indexes are close to the average.

Concerning the dynamics (95/90) the highest rate of increase of the index have privatized enterprises followed by the newly created private enterprises. The other two groups (the state enterprises) have a slight increase, less than the average.

If we combine the two indexes we can see that there is a tendency of decrease of the difference between POE and PRE while the other two groups (SOE, CE) deepen their delay.

Albania. For 1995 data show best results for POE. The arrangement is $POE > PRE = \text{average} > CE = SOE$. The dynamics for the period is not very big which is natural.

The arrangement is $PRE = CE = PO = \text{Eaverage} > SOE$. If we combine the two indexes we will have the following groups: high values and average dynamics (POE), average values and average dynamics (PRE), low values and average dynamics (CE), low values and low dynamics (SOE). Therefore the arrangement is $POE > PRE > CE > SOE$.

When we compare the data for the three countries we'll see that the private enterprises perform better than the state. POE have better indexes, PRE are second, but in the three their dynamics is better which shows a tendency of closing to the level of POE. In the state enterprises the situation and the dynamics are different and we cannot talk about general tendencies for the three countries.

e. Export/Sales Ratio.

Bulgaria. To a high extent this is also determined by other factors outside the structures of ownership. The branch appurtenance, the size of the enterprises and the existing in the former period specialization in the frames of COMECON can influence very strongly the share of export in the total volume of sales.

Higher than the average is the share of export for SOE and lower for POE. The indexes of the other two groups of enterprises are close to the average. The arrangement is $SOE > CE \geq \text{average} \geq PRE > POE$.

The studied enterprises as a whole have increased the export share in the last 5 years. The dynamics though is different in the different groups. The highest rate of increase is in POE - almost twice higher than the average for the whole while in the other groups it is lower than the average, e.g. the newly created private enterprises very quickly increase the export share in the volume of sales reaching in this way the ratio which is characterizing the other groups of enterprises.

Romania. The highest is the share of the export in CE (significantly over the average). Much lower than the average is the share of export for SOE. The other two groups have indexes close to the average. The arrangement is: $CE > POE = \text{average} = PRE > SOE$. Concerning the dynamics, with highest percentage is the share of export in the volume of the sales in CE and with lowest in SOE. The arrangement is similar to that in the former

index $CE > PRE = \text{average} = POE > SOE$. It means that as a whole the export/sales ratio now has changed in the years.

Albania. The highest share of export is in POE and PRE and with lowest - SOE. The arrangement is $POE = PRE > \text{average} = CE > OE$.

The dynamics of all groups is about the average index. The arrangement is $PRE = SOE = \text{average} = POE = CE$. As in Romania here we can talk about stability, keeping the existing position in different groups of enterprises.

As we can see, the data don't give opportunity to generalize the tendencies for the export/sales ratio index and the form of ownership which are common for the three countries.

f. Age of Capital Stocks.

It should be pointed that all newly created private enterprises in Bulgaria, Romania and Albania are created after 1990 and that's why the age of their equipment by rule is under 10 years except in the cases when they have bought machines and equipment at second hand. The privatized enterprises have inherited the age structure of their equipment from the state enterprises. The positive influence of the private property and especially of the concentrated private property should be felt as stronger as much more time has passed after the privatization.

Bulgaria. Data show that POE has the greatest share from the assets of age to 5 years. The share of the new machines and equipment is 3-10 times higher than in other groups of enterprises. The arrangement is the following - $POE > \text{Average} = PRE > SOE > CE$. Contrary is in data about the share of the assets of age more than 15 years - $POE < SOE < \text{Average} < PRE < CE$. It can be seen that in both cases POE have the most favorable results while CE - the most unfavorable.

The changes in 1990-95 in the share of the equipment of age more than 15 years in much greater extent can be connected with the type of ownership. Data show that the biggest improvement is again in POE, followed by PRE, while in CE on the contrary the situation is bad - the share of the old machines and equipment has increased with 5,17 percentage points.

Romania. The highest share of the assets at age not more than 5 years have POE. And the difference is quite significant - about 80% against 10-15% for the other groups. The arrangement is $POE > \text{average} > PRE \geq SOE > CE$. The groups are arranged in the same order concerning the share of the assets at age over 15 years with the difference that here the lower share puts the group at front position.

Concerning the dynamics of renewal of the old assets there are positive tendencies in the recent and former state enterprises (their share decreases with 4-6%). Only in POE there is a tendency of increasing this share. The arrangement is $CE > SOE > PRE > \text{average} > POE$.

Albania. The two groups private enterprises have higher share new assets and the difference is significantly in favor of POE. $POE > PRE > \text{average} > CE > SOE$. The arrangement is the same concerning the old assets (over 15 years) and of the dynamics of their renewal. Similar to Bulgaria, in the state enterprises the share of the assets over 15

years does not decrease and in this way the scissors between them and the private enterprises is getting wider and wider.

g. Level of Technology.

Bulgaria. The total estimation varies between 2,11 and 2,50 which means closer to low (2) than to average level in the developed countries. Most self-critical are the managers of POE while those from SOE estimate highest their technological level (2,50). SOE have the lowest share of old equipment compared with the other state and privatized enterprises. Probably in their creation 10-15 years ago these enterprises have been modern and their managers continue to live with the impressions of the past.

Romania. The total estimation varies between 1,87 and 2,57 which means under the average level of the developed countries. The managers of the state enterprises notify the fact that the technology their enterprises have is old and estimate it under 2. The arrangement is $POE > \text{average} \geq PRE \geq POE \geq CE$.

Albania. The managers of the studied enterprises give considerably high estimation of the level of the technology in them. The estimations are between 2,47 and 3,60 which means about the average level of the enterprises from the developed countries. This overestimation is likely made from all groups because the arrangement seems realistic compared with for example the age of the capital. $POE > PRE > SOE \geq CE$.

Interesting is the self-evaluation of the managers for the level of technology in their enterprises in relation with that of similar enterprises in the developed market economies compared with the age of the equipment. It is normal to suggest one-way between the two indexes in the different groups of enterprises according to the type of ownership and type of control. We can suggest that the managers of the private enterprises know better and estimate more objectively the current technical level and technology in their field while those of the state enterprises still have not overcome the complex of isolation. The reason for such suggestion is strengthened by the international comparisons. For instance, the managers of the Albanian enterprises, which country was mostly isolated from the outer world, estimate the technological level of their enterprises higher than this in Bulgaria and Romania and very close to the average level of the developed countries in case that 56% of the equipment of the studied enterprises in Albania is older than 15 years.

Comparing the three countries we can conclude that there are not common links between the form of the ownership and the level of technology. The arrangement of the groups of enterprises in Romania and Albania is similar but the number value of the estimations differs significantly.

h. Economic position. The results reveal the answers of the managers to the question How do they estimate the economic position of their enterprises in the last years in the range of 1 (very bad) to 5 (very good). In Bulgaria POE estimate their position the highest (3,81) while SOE - the lowest (3,00). The estimation of the Romanian managers from the different groups are very close - from 3,20 to 3,57. The arrangement is $PRE \geq POE \geq SOE \geq CE$. Different from them, the estimations of the managers in Albania differs sensitively. The arrangement is $POE > PRE \geq \text{Average} \geq SOE > CE$.

The short presenting of the performance of the groups of enterprises according to their indicators shows that their values are unique and vary in a rather wide range and the arrangement of the groups of enterprises differs too much. It can be said that the arrangement is almost unique by each indicator. There are very few exceptions. For

Bulgaria for example there are three equal arrangements POE>PRE>CE>SOE, for Romania - three equal arrangements POE>PRE>SOE>CE. In the case of Albania there are comparatively clearer grouping - five equal cases of arrangement POE>PRE>CE>SOE and three cases POE>PRE>SOE>CE. Out of 42 versions of arrangements 14 cases are grouped in 4 versions and in the other 28 cases the arrangement is unique.

These observations show very clearly what difficulties face the researchers of the firm performance in the transition economies. If a person decides to use one of the indicators for firm performance his conclusions can be argued by every other person who has used another indicator nevertheless both have been very right. As it has been shown above, we hope that the mentioned difficulties can be overcome with the use of general performance index.

5. General Performance.

Tables 2-4 generate the results from the performance of the enterprises with different type of ownership as it is searched a general index for performance which should generate 13 indexes, analyzed above.

The values on each index are re-calculated and that of the best group is accepted as 100. The general index for performance is arithmetic mean of 13 indexes for each group and shows the ratio of its real performance to the best possible performance.

Bulgaria. Data from the Table 2. confirm the main part of the hypotheses made in the beginning. As a whole the private enterprises perform better than the state, the newly created private enterprises - better than the privatized and the last have better indexes than both groups state enterprises.

Especially significant are the values of the newly created enterprises. In 9 from 13 cases their performance indexes are best and their general index is significantly higher than those of the other 3 groups of enterprises.

Table 2. General Performance by Forms of Ownership in Bulgaria

No	Indicators	Year	State		Private	
			SOE	CE	PRE	POE
1.	Sales	95/90	27	39	30	100
2.	Employment	95/90	4	5	8	100
3.	Productivity	95	4	20	20	100
		95/90	62	100	62	18
4.	Profit/sales	95	1	13	60	100
		95/90	100	0	80	61
5.	Export/sales	95	100	84	81	72
		95/90		48	22	100
6.	Capital: age 0-5 years	95	18	10	34	100
	age >15 years	95	27	9	11	100
	age >15 years	95/90	32	0	53	100
7.	Level of technology	95	100	88	94	84
8.	Economic position	95	79	86	88	100
9.	General performance index		46	38	49	87

The only case in which the initial hypothesis did not confirm is in connection with the ratio SOE/CE. The general performance index of SOE is higher than this of CE. The reasons can be specific especially having in mind that the group of SOE includes only 2 enterprises.

Romania. The general performance index for the studied enterprises in Romania shows again that the best results has the group of newly created private enterprises and that these results differ sensitively from these of the other groups. In 7 out of 13 cases their performance indexes are best while for the privatized enterprises this is seen in 2 cases, in corporatized enterprises in 3 cases and in 1 case in the traditional state enterprises.

Table 3. General Performance by Forms of Ownership in Romania

No	Indicators	Year	State		Private	
			SOE	CE	PRE	POE
1.	Sales	95/90	17	11	13	100
2.	Employment	95/90	4	2	4	100
3.	Productivity	95	10	6	7	100
		95/90	100	93	90	43
4.	Profit/sales	95	61	35	69	100
		95/90	50	61	100	84
5.	Export/sales	95	12	100	66	68
		95/90	16	100	76	70
6.	Capital: age 0-5 years	95	20	14	20	100
	age > 15 years	95	9	7	9	100
	age > 15 years	95/90	82	100	80	0
7.	Level of technology	95	76	73	81	100
8.	Economic position	95	94	88	100	98
9.	General performance index		45	53	55	82

The general performance indexes of the privatized and corporatized enterprises are quite close, as very little advantage has the first group. Data for the traditional state enterprise are lowest. As a whole the arrangement is POE>PRE>CE>SOE which completely confirms the initial hypothesis.

Albania. The arrangement of the four groups of enterprises in Albania according to the general performance index is similar to this in the other two studied countries - POE>PRE>CE=SOE. Again the index of the newly created private enterprises is sensitively higher than this of the other groups of enterprises. In 9 out of 13 studied enterprises the indicators for performance of the newly created private enterprises are the highest. The specifics can be observed in two directions. First, the privatized enterprises have sensitively higher value of general performance index which are much closer to those of POE than in the other two countries. The second specifics is that the values of general performance index for the two groups of state enterprises are equal. The two groups of enterprises don't have in any of the cases the highest values of the indicators for performance.

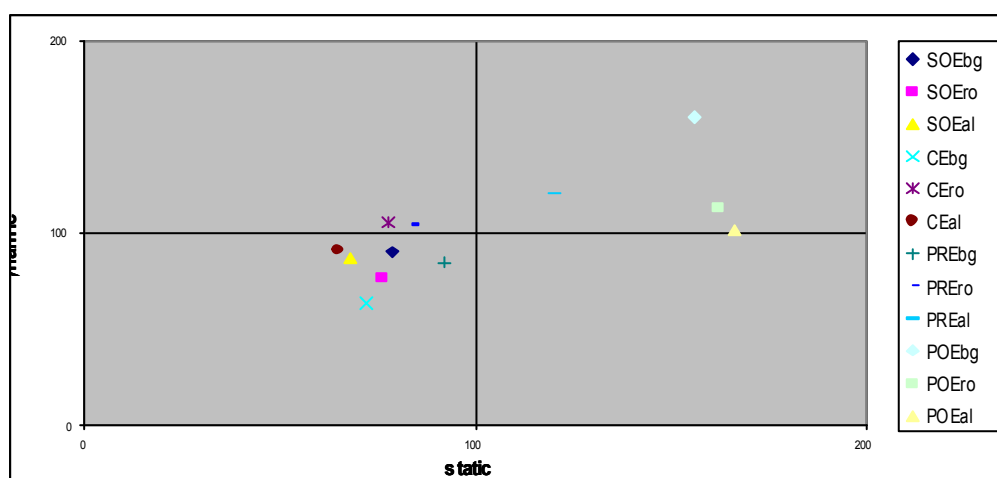
Table 4. General Performance by Forms of Ownership in Albania

No	Indicators	Year	State		Private	
			SOE	CE	PRE	POE
1.	Sales	95/94	79	72	100	77
2.	Employment	95/94	70	76	83	100
3.	Productivity	95	35	29	55	100
		95/94	87	79	100	67
4.	Profit/sales	95	44	47	72	100
		95/94	23	96	100	94
5.	Export/sales	95	14	68	98	100
		95/94	96	90	100	95
6.	Capital: age 0-5 years	95	5	12	45	100
	age > 15 years	95	11	13	21	100
	age > 15 years	95/94	42	0	60	100
7.	Level of technology	95	71	67	84	100
8.	Economic position	95	79	72	92	100
9.	General performance index		55	55	78	95

The use of a big number of dynamic and static indicators for firm performance gives the opportunity to estimate these two aspects (see Figure 1.).

Interesting are the conclusions which can be made by the comparative analysis for the significance of the dynamic and static indicators of firm performance. In the enterprises in Bulgaria we can see that in the arrangement of the groups according to the dynamic indicators for firm performance SOE takes the place of PRE from the second place. The difference is not big - 5% but deserves to be mentioned. This means that the initial static indicators for firm performance of the privatized enterprises have been higher than these of the traditional state enterprises. The higher general performance index of PREbg is due more to the fact that these enterprises have been better in the beginning of the period, before their privatization.

Figure 1. Dynamic and Static Indicators for Firm Performance



The corporatized enterprises (CE) in Bulgaria have significantly lower values of the dynamic indicators for firm performance than SOE and PRE. As a result of this their performance in the end of the period are lowest, nevertheless that in the beginning they have been higher than those of the other groups.

Slightly shown dynamics of CE gives reason for another explanation for the delay of PRE compared with SOE. The privatization in Bulgaria is delaying. Even PRE to have higher dynamics than SOE this is not enough to compensate the big delay from the first part of the studied period when these enterprises have been CE. Additional confirmation for such conclusion are the data for Albania. The privatized enterprises are characterized with relatively higher dynamics but in this country the enterprises have been privatized comparatively later.

The general conclusion which can be made from our study is that the hypothesis for the better performance of the private enterprises compared with the state enterprises is confirmed. General performance index for the privatized as well as for the newly created private enterprises is higher than this of any of the other two groups of state enterprises. Also the data for the three countries shows very clearly that the performance of the newly created enterprises is better and significantly better than the other groups, incl. the privatized enterprises. The arrangement of the two groups of state enterprises is not identical in the studied countries. The equal between the three countries is that the general performance index of SOE and CE are close to each other but the arrangement is different - SOE>CE for Bulgaria, SOE=CE for Albania and CE>SOE for Romania.

6. Policy Conclusions.

The results of the comparative analysis of the firm performance of the 4 groups of enterprises from Bulgaria, Romania and Albania, arranged by their form of ownership, give opportunity to make recommendations to the policy makers from these countries.

The state enterprises in the three countries show worse performance indexes than the private ones. It is necessary to fasten their privatization in order to improve the performance of the economies as a whole. The opportunity to solve the problems of the performance by corporatization of the traditional state enterprises is limited and the results are contradicted. In Albania CE have equal general performance index as SOE, in Bulgaria it's even worse. Many of the problems can be due to the semi-market environment in which the state enterprises operate but this is just another argument in favor of the faster privatization. The bigger private sector in the economy is one of the main conditions for creation of adequate market institutions in a certain country.

For Bulgaria also one of the big problems is improving the performance of CE. Their relative results are worst than all 12 groups of enterprises in the three countries. Having in mind, that the privatization of the big enterprises is not executing fast, one of the main directions of the industrial policy in this country should be the improvement of the firm performance of CE before their privatization.

The encouraging of creation of more new private enterprises seems as the best opportunity for improvement of the performance of the three countries. This group of enterprises has not only the best indicators but they also differ sensitively from these of the other three groups. This conclusion is valid for the dynamics as well as for the level of firm performance in each of the three studied countries. But this does not solve the problems of

the state enterprises. The privatization of the bigger part remains at this stage the more successful solution.

Ownership and Control in Bulgaria, Romania and Albania

Evgeni Peev

1. Introduction

The paper aimed not only at describing well-known information (or misinformation) but at carrying out its *own theoretical* research as well. The idea giving energy to the research was approbation of the Bearle-Means thesis in three countries in south-eastern Europe 65 years after its formulation, in order to create concentrated knowledge which can serve us today and years later to achieve a better understanding of the evolution (and revolution) of economic organizations.

The economic phenomenon which is being researched here is known in the literature as 'separation of ownership and control'.

The subject of the study is south-east Europe, a region which is still insufficiently studied. In the course of the study (1996 - 1997) the region saw political unrest which led to change of the Romanian government in November 1996, pre-term change of the Bulgarian socialist government in April 1997 and the forceful change of the government and pre-term general elections in Albania in June 1997. In spite of the unrestful environment a questionnaire survey of 305 firms was carried out successfully. Such kind of survey of 305 industrial enterprises in Bulgaria, Romania and Albania based on separation of ownership and control **has been done for the first time in the region.**

Section 2 focuses briefly on the general theoretical and methodological framework of study. Section 3 presents practical evidence of ownership and control structures in three countries. Section 4 concludes with typology of inefficiency based on separation of ownership from control and policy implications.

2. Theoretical Approaches and Data Collection

The common research model of the study was based on an integral theoretical approach.

We used the *property-rights approach* in the study of **ownership and control structures** of business organizations in the surveyed countries, *agency theory approach* - in the study of basic **governance structures** for disciplining managers, *managerial theories of the firm* - in the study of **managerial discretion and managerial behavior**, the literature dedicated to *empirical study of the relationship between ownership and performance* - in the study of the relationship between **ownership, control and performance**.

At the core of our analysis of business behavior does not lie profit maximization but the **utility-maximization hypothesis** about individual choices, made by managers, workers and owners under transitional institutional constraints. In economies in transition, *managerial behavior* is influenced by the specific semi-market environment, characterized by high political uncertainty, macroeconomic instability, strong fluctuation of input and output prices and financial performance measures. The inefficient behavior of *owners* (observed in the mixed economy, too) is much more typical of transitional economies because of the particularities of the arising economic **system of primary accumulation of capital**.

The information collected was of two main kinds.

First, statistical information which is regularly collected by the central statistical offices in these countries.

Second, data for enterprises which are not collected in a centralized way and which include information on issues such as: (a) ownership and control of enterprises, (b) specific governance structures for settling the conflict of interests between owners and managers, (c) different extents of influence exerted by different economic actors on the decision-making process regarding sales, employment, investments, etc., (d) different aspects of enterprises behavior, including sales, employment, exports, etc. This data was collected by doing a questionnaire survey.

During the period August - December 1996 a questionnaire survey of 305 enterprises was carried out in Albania, Bulgaria and Romania. The target of the survey were industrial enterprises, the selection criterion being the number of the personnel to be over 50 people. (In the course of the survey firms with a smaller number of personnel were included. E.g. in Bulgaria most of the newly-founded industrial firms have personnel under 50 people).

The survey comprised four major groups of firms, classified according to the type of ownership: state-owned, corporatized state-owned, former state-owned firms which have been privatized, and private firms established *de novo*.

The main steps of the data analysis were: a) Descriptive industry analysis; b) Summary statistics; c) Summary statistics analysis; d) Hypotheses clarification; e) Regression analysis; f) Comparative analysis.

3. Cross -Country Study

A brief summary of some basic outcomes is presented below.

A. Ownership, Control and Performance

a. *State firms.* Traditional state-owned firms continue to exist in Romania and Albania while in Bulgaria they constitute a small number and do not have real significance for the economy. A specific feature of their ownership structure in Romania and Albania are the unestablished property-rights. In Romania there is '*transitional*' *separation of ownership and control* and high managerial discretion. In Albania managers do not have discretion and it is not clear who exercises control rights

b. *Corporatisation.* State enterprises transformed into corporatized state-owned firms at the beginning of the reform in the 90ies still exist in Bulgaria and Romania. There is '*transitional*' separation of ownership and control, a specific phenomenon in the process of post-totalitarian primary accumulation of capital. Enterprises are characterized by unestablished property-rights and a high degree of managerial discretion. Unlike these two countries, in Albania corporatized state-owned firms have a short life, unestablished property-rights and low managerial discretion.

c. *Privatization.* In each of the three countries the privatization is carried out in two phases: phase one - privatization of small and medium-sized enterprises by cash, and phase two - mass privatization by vouchers. After the first phase a more concentrated ownership structure with prevailing outsider control was formed in Bulgaria and Albania, while in Romania - more dispersed ownership and dominant insider control. *Separation of ownership and control* was discovered in enterprises with an employee dominant owner in Bulgaria and Romania, and was not discovered in enterprises under foreign control (Bulgaria) and under outsiders' control (Albania).

After the second phase of privatization (mass privatization), ownership is more dispersed in the three countries, and the typical kind of control in Bulgaria and Romania is managerial and minority control. There is *separation of ownership and control* in them, and in Albania it was discovered in enterprises under insiders' and workers' control (but not in enterprises under outsiders' control and foreign control).

d. *Private firms de novo.* In the three countries the newly founded private firms have concentrated ownership, with the dominant owner - the managers and there is no *separation of ownership and control*. Typical only of Albania is the active participation of foreign investors in the creation of private firms de novo.

e. *Post-privatization ownership concentration.* In Bulgaria and Romania after the mass privatization a fight for efficient corporate control started. In Bulgaria, it is mainly by proxy fights while in Romania capital markets have started to take part actively.

g. *Governance structures.* In the three countries external market governance mechanisms are undeveloped. The stock exchange and OTC capital markets are relatively more developed in Romania, then in Bulgaria, and the least developed in Albania. There exists gray economy in the three countries and what is more important a specific corporate culture of post-totalitarian primary accumulation of capital has been formed. The most pessimistic estimation of its share is given by private firms de novo in Bulgaria and Romania, and traditional state-owned enterprises in Albania.

h. *Managerial strategies and firm performance.* The most pessimistic managerial strategies to restructuring exist in state enterprises in the three countries, and the most active - in privatized enterprises in Bulgaria and Romania.

Private firms de novo show the best performance in the three countries, followed by privatized enterprises (Bulgaria and Albania) and autonomous state enterprises in Romania. Third come corporatized state-owned enterprises (Bulgaria and Albania) and privatized enterprises (Romania). The worst performance is shown by state enterprises - corporatized state-owned enterprises (Romania) and traditional state enterprises (Albania).

Enterprises under outsiders' control have better performance than enterprises under workers' control.

B. Hypotheses Tested

The hypothesis that state enterprises should have worse performance and higher managerial discretion than private ones (***the property-rights hypothesis***) was confirmed according to the performance indicators. *State enterprises with unestablished property-rights and separation of ownership from control, however, does not automatically mean higher managerial discretion in transitional context.*

The ***Bearle and Means thesis***, that dispersed ownership and lack of dominant owner control lead to high managerial discretion and worse firm performance than more concentrated ownership structure is confirmed in relation to newly found private firms and privatized enterprises under outsiders' control. However, *privatized enterprises with dispersed ownership and a lack of a dominant owner do not differ significantly from those with more concentrated ownership. Separation of ownership and control does not lead to higher managerial discretion.*

The hypothesis that internal governance mechanisms such as managerial ownership and the Board of Directors should have a positive influence on firm performance (***governance hypothesis***) in privatized enterprises was not confirmed. Managerial ownership is positively connected only with managerial discretion.

4. Property-Rights Structures Evolution and Policy Implications

The research reveals that in a transitional context, separation of ownership and control has two manifestations. One is conventional, known from the practice of market economies.

The other one characterizes separation of ownership and control as a specific form of post-totalitarian primary accumulation of capital. Its specific features are: a) *a disintegrated state institution*, which withdraws from control of enterprises and gives them pseudo-autonomy and non-owners discretion (for example, corporatised state-owned enterprises in Bulgaria and Romania); b) *owners with specific corporate culture*, aiming not at developing, but at plundering the enterprises (for example, large share holders in privatized enterprises in Albania).

With these owner objectives, concentration or dispersion of ownership, majority owner control or managerial control, the board of directors and other internal governance mechanisms are not a reliable institutional basis of prognoses and rational assessment of investors for firm efficient or inefficient behavior.

Aiming at creating a more systematic orientation of policy-makers and businessmen in the manifestations and development of such an important phenomenon as separation of ownership and control is, some basic results of the study are summarized in the typology presented below.

C. Typology of basic types of inefficiency based on separation of ownership and control in the evolution of state enterprises in transitional economies (Bulgaria, Romania and Albania)

Type A. *State-owned enterprises with transitional separation of ownership and control.* These are corporatised state-owned enterprises. In them, the owner - the government has withdrawn from control, and managers and other non-owners have discretion to decapitalise the enterprises in their favor. The efficient evolution of these enterprises is: from control based on unestablished property-rights to fighting for explicit corporate control and ***privatization***.

Type B. *Privatized enterprises with transitional separation of ownership and control.* These are privatized enterprises with dispersed ownership. In them, the inefficient behavior is due not only to managers but also to new owners. They are not entrepreneurs and do not have owner market motivation. The evolution of these enterprises is to ownership concentration and new objectives of owners. ***Secondary privatization*** is due through internal mechanisms or capital markets.

Type C. *Concentrated ownership structure with inefficient owners and managers behavior.* These are privatized enterprises, whose ownership is concentrated, but their owners have post-totalitarian corporate culture and pursue inefficient strategies. The efficient development of these enterprises requires ***secondary privatization*** (it can be through liquidation, too) and change of owners.

Type D. Dispersed ownership structure and conventional separation of ownership and control. These are privatized enterprises with dispersed ownership whose inefficiency is due to big managerial discretion. Ownership concentration and introduction of ***governance mechanisms*** for disciplining managers, known in market economy, are due.

Type E. *Concentrated ownership structure with market-oriented owners behavior*. In these enterprises the behavior of large shareholders is directed towards their development. Here, the basic problem is not the contradiction between owners and managers, but rather between large and small shareholders. ***Governance mechanisms*** for protection of small shareholders are to be developed.

D. Industrial Policy

The described different types of inefficiency give initial systematization necessary for establishing the priorities of the national industrial policy. They lead to three basic conclusions about the industrial policy in the three countries at the stage of transition they are at the beginning of 1998:

- 1) *two sectors* have been formed in the economy - one with the characteristics of market economy (type D and E enterprises), and the other one with transitional characteristics (type A,B and C enterprises, and the whole gray economy);
- 2) efficient industrial policy should include *active state intervention*,
- 3) unlike the set views that after the privatization, the state is 'freed' from its responsibilities, it turns out that its tasks in some cases will become even more complicated after privatization. Privatization will not be a one time process. Until 'normal' owners appear, the state should carefully monitor the development of privatized enterprises. Establishment of **institutions** for *post-privatization monitoring of enterprises* is recommendable.

Intercorporate Ownership: the 21st Century Revolution

Nikolay Naydenov

Introduction

The World entered the 1990s without the division of "East" and "West" which was based on difference of ideologies, political and economic systems. The values of democracy and the market economy principles have become more widely accepted and constitute the basis of social transformation in a large number of countries from different parts of the Globe. The most dramatic reforms are taking place in Central and Eastern Europe (CEE) and the CIS, where they amount to a radical change in the social systems. One of the most important aspects of transformation in this region is the transition from centrally-planned to market-driven economies. The reforming countries share the belief that the market, despite all its deficiencies and failures, is the best known mechanism for efficient resource allocation in the modern industrial economy.

A basic component of any economic system is ownership and the appropriate allocation of private property rights is considered to be one of the major prerequisites for economic efficiency in a market economy. Thus, when developing a market economy system, ownership relations can be regarded as its main building block.

This paper is devoted to one particular form of ownership, which is in congruence with the principles of the market economy, and which, albeit typical for the second largest market economy - Japan, has not been given due attention in discussions and practices of privatization in CEE. It is referred to as inter-market corporate alliance (ICA) in the text that follows.

In this period of rapid change in global socio-economic conditions, and particularly in the process of transformation of Central and Eastern European economies, it is difficult to overestimate the significance of a study considering alternative systems of business organization. The need for such a study stems also from the fact that the emphasis in discussions on privatization and economic restructuring in Central and Eastern Europe (CEE) has usually been put upon arm's length market transactions. The specific conditions in those countries, resulting from more than four decades of central planning, suggest that other, intermediate, forms could be more appropriate.

The exclusive attention given to the introduction of American-type corporate organization reflects the dominance in previous scholarly attempts of “[t]he “traditional” model of American corporate governance”, which “presented the Berle-Means corporation-characterized by a separation of ownership and management resulting from the need of growing enterprises for capital and the specialization of management-as the pinnacle in the evolution of organizational forms. Given this model’s dominance, the study of comparative corporate governance was peripheral; governance systems differing from the American paradigm were dismissed as mere intermediate steps on the path to perfection, or as evolutionary dead-ends, the neanderthals of corporate governance.”¹

More recent scholarship, as Gilson and Roe point out, challenges the “traditional” view, arguing that national systems of corporate organization are historically and politically contingent, and nothing in the evolutionary process of a particular system assures its productive superiority to systems that evolved under different conditions. This shift in the basic paradigm of American corporate governance theory, combined with “real world competition have obliged business scholarship to focus on comparative corporate governance”.²

Not surprisingly, American scholars have devoted much attention to business organization in Japan. Different aspects of Japanese business alliances have been discussed in an extensive set of literature. This paper adds a new aspect to the analysis of that type of organization, although not referring directly to concrete Japanese groupings of firms. Based on the study of Japanese horizontal corporate groups, an abstract model of an Inter-market Corporate Alliance (ICA) is presented, which is defined as a new model of corporate ownership, named *inter-corporate*. In this new type of business organization, it is argued, the separation of ownership and control is overcome by merging, through cross share holding among affiliated companies, the positions of stockholder and manager in the form of a Council of ICA firm presidents. Ownership takes on the added features of mutual business interests and, by enhancing information sharing, the firms' abilities for mutual monitoring are improved.

The 20th Century Capitalist Revolution

In analyzing ownership economists have focused on the possession of residual decision rights and the allocation of residual returns.

Residual rights of control give power to make any decisions concerning an asset's use which are not explicitly controlled by law or assigned to someone else by contract. The importance of residual control derives from the impossibility to write and enforce complete contracts and, as a consequence, the cost advantages of leaving all the control rights, that are not otherwise assigned, to a single, distinguished individual.

Contractual incompleteness gives rise also to the notion of residual returns. The owner of an asset is considered to be the residual claimant entitled to all the net income that the asset can be made to produce.

¹ GILSON, Ronald J. and Mark J. ROE. “Understanding the Japanese Keiretsu: Overlaps Between Corporate Governance and Industrial Organization”, *The Yale Law Journal*, Vol. 102, No. 4, January 1993, p. 873.

² *Ibid.*, p. 873.

Fama and Jensen also define the ownership relations as including “the contracts that specify (1) the nature of residual claims and (2) the allocation of the steps of the decision process among agents”³, and consider them central in any organization.

Adolf Berle also asserts that “property, theoretically considered, has two sets of attributes”⁴. In his words, residual control means using property as “a medium for creation and production and development”, and the right to residual returns “offers possibility for reception, enjoyment, and consumption”⁵.

In the owner-managed firm the entirety of ownership rights is concentrated in one physical person. “An old fashioned farm or small business property held by a single owner or small group of owners combined both groups of attributes in the same hands. The owner used his property to create, to produce, to improve. In a word, he used it as a capital. He also used it to provide for his needs and for his enjoyment - in other words, for his consumption. Life was all in one piece, and the attributes were intertwined.”⁶

“The twentieth-century corporation has proved to be the great instrumentality by which these two groups of property attributes have been separated one from the other”. It led to a “split of property into its component attributes, assigning the receptive attributes to the group of shareholders, and gathering the creative attributes in a single command”⁷. Thus, in the joint-stock company the functional components of private property rights are allocated among different agents. In a classic book on what is known now as the separation of ownership and control, Berle and Means argued that the rise of the large, diffusely held, professionally managed corporation fundamentally altered the nature of firm ownership. “In terms of relationships, the present situation can be described as including:-(1) “passive property,” consisting of a set of relationships between an individual and an enterprise, involving rights of the individual toward the enterprise but almost no effective powers over it; and (2) “active property,” consisting of a set of relationships under which an individual or set of individuals hold powers over an enterprise but have almost no duties in respect to it which can be effectively enforced.”⁸

Thus, while the “pre-corporate” firm consists of two main subsystems - owner-manager and internal organizational structure, the corporation comprises three: owners (shareholders), top management, and internal operating units. Shareholders and firm management are linked through capital market instruments and, in the traditional approaches to corporations, shareholders’ primary concern is considered to be the short-run profitability of the firm.

In short, the separation of ownership and control in the modern corporation has been regarded as altering the nature of private property, and in the 20th century the corporate form became so widely spread that it “revolutionize[d] national life”⁹. This process was labeled by A. Berle “the 20th century capitalist revolution”.

³ FAMA, Eugene F., and JENSEN, Michael C. "Separation of Ownership and Control", *Journal of Law and Economics* XXVI, June 1983, p. 302.

⁴ BERLE, Adolf A. *The Twentieth-Century Capitalist Revolution*. London: Macmillan & Co Ltd, 1955, p. 18-21.

⁵ *Ibid*.

⁶ *Ibid*.

⁷ *Ibid*.

⁸ BERLE, Adolf A. and Gardiner C. MEANS. *The Modern Corporation and Private Property*. New York: The Macmillan Company, 1932, p. 347.

⁹ BERLE, *Supra*4.

Inter-market Corporate Alliances (ICA): A New Type of Ownership?

The twentieth-century corporation has proved to be the great instrumentality by which the rights of residual control and to residual claims have been separated one from the other. It is also among the corporations of the 20th century that a new organizational structure has emerged - the inter-market corporate alliance (ICA), which can be regarded as a “great instrumentality” for new interweaving of the different functional components of ownership.

The prototype of the theoretical model of ICA can be found among Japanese business groupings. Most industrial firms in Japan are affiliated with some enterprise grouping, which can be divided into two broad categories: horizontal and vertical. There are six big horizontal groupings, called *kigyoshuudan*, which play an important part in the Japanese economy - Mitsui, Mitsubishi, Sumitomo, Fuyo, Dai-ichi Kangin, and Sanwa. The first three groupings have direct roots in the pre-war financial empires - “zaibatsu” and they are the ones that can be described as ICA. This type of organization, as Gilson and Roe point out, “reflects not only the need for *corporate governance*, ... , but also the need to support production and exchange - what we will call *contractual governance*.”¹⁰

Structure of ICA

The study of Japanese horizontal inter-market enterprise groupings allows to derive the main characteristic features of an ICA.

The basic *elements* of ICA should include:

- 1) large *manufacturing firms* covering wide range of industries. The aim should be to encompass all major industries, but to include preferably no more than one firm of each industry. Such an organization will preclude internal competition, and will ensure conditions for more intensive intragroup transactions;
- 2) a large *trading company*, which should play a significant part in the organization of inter-firm relations on commodity markets. This will allow to take advantage of trading in large volume and price differentials in different markets. Such companies can invest in the accumulation of foreign market experience and in building their own business networks abroad. They could play the role of an information center by gathering global information, representing their client firms in multilateral negotiations, and by arranging formalities concerning joint projects of alliance companies;
- 3) financial institutions, with a centrally positioned commercial bank, which is the “*main*” *bank* for the affiliated companies in the sense that it procures a large portion of firm loans from private financial institutions, and, in most cases, is a major shareholder. The existence of an implicit long-term contract between the main bank and alliance firms is essential for creating greater credibility and readiness among other banks and financial institutions to extend credits to affiliated firms. This is facilitated by the main bank’s role as delegated monitor for other banks-creditors of its main client firms;
- 4) a forum for co-ordination of firm activity within the ICA - *Council of Firm Presidents*. It has regular meetings and is very important for the strategic interaction of affiliated firms, since they can exchange information and views on matters of mutual interest, which is very important for problem solving and conflict resolution within the ICA.

¹⁰ GILSON and ROE, *Supra* 1 , p. 874.

The main forms of firm ***interconnections*** are:

a) *cross share holding*. A circular interdependence is ensured by each affiliated company holding shares of many of the other companies so that the controlling share of the stock of a separate firm is in the hands of other firms from the same ICA;

b) *intragroup transactions*. Large quantity of loans flows through the “main” bank, and large volume of trade is realized through the trading company. Preference is given to transactions with other affiliated companies;

c) *interpersonal network*. The contacts between employees of affiliated firms on different levels enhance the exchange of information among firms, and can serve as a means of external control. The exchange of personnel allows the transfer of necessary knowledge and skills when entering new spheres of activity. Regular meetings of directors, managers, heads of departments, technical staff are crucial for building such an interpersonal network within the ICA;

d) *joint projects*. Firms in ICA can invest jointly in new industries and production lines, as well as in common research and development facilities.

In this way, among enterprises in ICA multiple overlapping relationships exist: loans from the same bank, cross share holding, interlocking directorates, transacting through the same trading company, coordinated planning through the Council of Firm Presidents. When a company is a leading shareholder in a certain firm, the probability is very high that this company will also be an important trading partner, creditor, and will have representatives in the Board of Directors of the same firm.

Inter-corporate Ownership

In the ICA, and particularly in the cross holding of shares among affiliated companies, a new interweaving of the different functional components of ownership rights is achieved, which gives ground to regard this organizational form as a new “revolution” in ownership, giving rise to a new type of ownership. This new type can be called “inter-corporate model of share ownership”, or “inter-corporate ownership”.

The inter-corporate model is based on the corporate form. As no clear distinction can be drawn between private property and corporate ownership, so ownership in ICA retains the form of share ownership. The definition “inter-corporate” indicates that it is the corporations themselves that become the main subjects, as well as objects, of ownership.

What gives ground to consider ICA as being a new type of ownership?

First, ownership and control are realigned. *Second*, the objectives of firm ownership are changed. *Third*, the monitoring and control mechanisms are modified.

Realignment of Ownership and Control

Residual risk bearing and residual control are brought together again in one and the same subject, since the group of owners in ICA and the group of the managers of the affiliated firms overlap to a great extent. The principal shareholders in ICA companies are other firms from the same alliance. These firms-owners are represented by their managers, the latter combining the functions of managers of their own firms and owners of other

affiliated companies. In this way, the Council of ICA Firm Presidents embodies both the management and ownership functions of the alliance as a whole.

If, as A. Berle asserts, the separation of ownership and control is a revolution in ownership and changes the character of private property, then the new merging of those two sets of ownership attributes should also lead to such a revolutionary change, and may be regarded as a new “revolution” (should we call it the 21st century revolution?). This merging, however, comes at a higher evolutionary level: not in the figure of a single owner-manager, but in a group of firm presidents who, as a result of cross share holding among their companies, combine the functions of ownership and management of the group of firms.

Thus, in terms of dialectics, if the owner-managed firm is the *thesis* and the corporation is the *antithesis*, then the new form is the *synthesis* combining elements of the two former types, but with modified qualitative characteristics. E.g., ICA retain the advantages of the corporate form of organization, as each of its firms operates as a legally independent entity. Outside capital can therefore be raised, a division of labor maintained, and risk diffused. However, since the main investors are other corporations, ownership becomes a means for structuring relationships among those corporations in ways that set markets for capital and control in the context of other business interests. The stock market continues to allocate capital and responds to conditions of supply and demand, but corporate ownership acquires the new characteristic to help protect and promote firms’ strategic interests.

Change in the Objectives of Share Holding

Whereas in the traditional corporate governance models shareholders’ primary concern is the short-run profitability of the firm, participation in ICA leads to a considerable diminishing of the importance for the firms-investors of their returns as shareholders. At the same time, much more essential for them becomes the stability of their partner firms as secure suppliers and clients. It is natural for such leading “shareholders” to consider the long-run development of the firm more important than the insignificant from their point of view returns on its stock. Indeed, by virtue of the cross holding of shares, paying dividends to affiliated firms-shareholders amounts to retaining the due sum within the firm. In this way, ICA firms have more discretion in the use of their profits, which also need not be maximized in the short-run. The main purpose of cross share holding in ICA is to support and encourage efficient production. It becomes a productive structure, a means for the integration of clients and suppliers, of different parts of the production process, whereby the investors are a mere constituent element

Control in the Inter-market Corporate Alliance

The traditional corporate governance relies heavily on the market for corporate control, which is external for the firm, to ensure compatibility of the objectives of managers and owners. On the other hand, the structure of interrelations in ICA is characterized by the merging of shareholder and management positions in a complex network of overlapping business and corporate interests, which internalizes the control mechanisms within the alliance. The mechanisms in the ICA for monitoring and control over the management of a separate firm include mutual monitoring, forming coalitions of shareholders, and the alliance bank’s role as a monitoring and controlling agent.

The existence of alliances favors the formation of coalitions among the participating firms for exerting influence over the management of a separate firm. The considerable quantity of shares held by a limited number of affiliated firms brings the costs of building and maintaining the coalition to a low level.

The cross holding of shares and the exchange of personnel can be regarded as efficient monitoring mechanisms in view of the commitment of the affiliated firms to long-run relationships with each other. The monitoring activity is not the prerogative of a single member, since the characteristics of ICA lead to mutual monitoring among member firms.

The main bank in the alliance also plays important monitoring and control functions. In normal circumstances it does not exercise explicit control over firm policy or the choice of management, but it could intervene in different ways in management when the firm does not perform satisfactorily or is in need of some kind of restructuring. This function of the main bank serves as a substitute for the external market for corporate control by replacing inefficient managers and reorganizing firm assets to improve performance.

Revolutions in Ownership and Privatization in Bulgaria

The study of the ICA type of business organization might give useful insights for the process of privatization in post-socialist Bulgaria. A new type of privatization through the exchange of stock among enterprises can be resorted to, the aim of which should be the formation of inter-market corporate alliances. Two points can be made to illustrate some relevance of the introduction of the inter-corporate model into economies in transition from socialist to capitalist-market system.

1) The ICA model of organization could be a good way to solve problems pertaining to the structural reform of the economy. The creation of a couple of competing with each other “mini-economies” will channel capital in the ICA to such enterprises, which will guarantee the highest return on investment, because, as a result, all the firms will be better off. By thus extending the activity of some firms, at the same time inefficient production sites can be divested of, directing the released workforce to the growing enterprises.

2) In the transition from central planning to a market-oriented system firm managers are not prepared to act in a free-market environment and that is a major problem. To overcome this, it is essential for firm managers, besides acquiring solid theoretical background, to obtain more complete information about the concrete market circumstances and to build in a short period of time the necessary practical managerial skills. An important element in this process is learning by doing. The Council of ICA Firm Presidents serves to co-ordinate affiliated firms’ activities, but it could also become a forum for enhancing managerial skills by sharing information about encountered problems and the solutions found.

By introducing the ICA in some transition economies, the efficiency of this organizational form will be put to the test in a different environment from the one, in which its prototype has emerged, and, maybe, will be given a chance to become spread in other countries as well, thus reaching a scale that can revolutionize the socio-economic systems where introduced. After this happens, the 21st century corporate revolution, as defined in this paper, will have taken place.

China In Search of an Efficient Corporate Governance System: International Comparisons and Lessons

Jean-François Huchet and Xavier Richet

1. Introduction

Since the beginning of the economic reforms in 1978, China has been searching for an efficient corporate governance system for its State Owned Enterprises (SOE's) through different waves of reforms. Although some progress has been made in this field, a great part of SOE's remain inefficient and unable to compete in a market environment. Recently, the XVth Party Congress has adopted further reforms and recognized the necessity to clarify property rights, to separate ownership and management in the biggest SOE's and to privatize most of the small and medium size enterprises. It is still unclear which form of control will emerge from these reforms but recent researches tend to demonstrate that like former socialist countries, corporate governance in SOE'S seems to evolve toward an "insider" stockholder type control (mainly managers, and local State Holding Companies). Compared to the traditional standard model based on private property rights and control by financial markets, the type of control which is emerging in China does not represent the best solution given the current need of SOE's for external capital, expertise, and monitoring.

Nevertheless, international comparisons with other economies in transition and a historical analysis of corporate governance system in Japan and some European countries could provide China with some useful lessons. The so-called 'neo-classical' model on which the American is based is certainly a benchmark, or a useful reference but other models of corporate governance systems have contributed to rapid economic development. It is also not certain that in transition economies, at least in the first stages of their transformation, where financial and legal institutions are lacking or take time to develop, this model represents the more adequate solution. Corporate governance systems do not simply fall from the sky; they are the result of both institutional design, social and political experimentation and developments.. If property rights matters and if the need to control companies is obvious in any system in order to avoid economic wastes, alternative or hybrid models of corporate governance systems have helped, to some extent, to discipline the behavior of firms

The banking system, the competition policy, the level of competence of the human resources, etc. can also provide an efficient control over firms. In fact, all these elements relate to each other in a systemic way, and shape corporate governance system in a specific manner among countries and sometimes among industries. Finally, Corporate Governance systems are not static : they evolve and respond to domestic and international pressures. Even if globalization in the financial markets tends to reduce the diversity of corporate governance systems, the lessons drawn from this international comparison demonstrate that China still has room to implement an eclectic approach to improve its corporate governance system. But China will have to work on different fronts simultaneously to improve its corporate governance system in the SOE's: urgent and drastic reform is needed especially in the banking system, to improve competition policies and to ensure that shareholders rights are protected within a legal framework.

Section 2 will assess the performances of the corporate governance system and the new steps of the reform in this fields after the XVth Congress Party; section 3 will review alternative models of corporate government systems that can be found in developed market economies in other transition economies; section 3', tries to draw some lessons from international comparisons for further reforms of the corporate governance system in China.

2. The Limits of Corporate Governance System Reform in China

2.1. The Relative Failure of the "Contract Responsibility System" Policy

The transfer of decision making power from the bureaucracy to the management of enterprises has been the main tool that Chinese policy makers have used to reform the corporate governance system in the State sector. Fifteen years after the "contract responsibility system" has been generalized in Chinese SOE's, management autonomy has increased significantly (Bird 1992; Lu and Child 1996; Warner 1995). Although the bureaucracy still exerts its decision making authority in some very important matters (n°10 to n° 14), table 1 shows that management enjoys by now a great deal of autonomy in decision making. Furthermore, by the mid-80's, the Center has relinquished nearly all its administrative powers to local level authorities where the management of small and medium SOE's was concerned. Before the beginning of the reforms in 1978, the SME in China already enjoyed much more autonomy than in the planned economy of the former USSR, but their adoption of the 'Contract responsibility system simplified even more the decision-making process for this category of enterprises.

Compared with the old centralized and planned system before the reforms, the transfer of autonomy has created a lot of new incentives for the SOE's to invest in new productions and to respond to the needs of markets. But these reforms are far from having created an efficient corporate governance system. State sector is still plagued with problems which reveal how inefficient the corporate governance system is. Most of those problems have been extensively analyzed in the literature, but we would like here to focus on three of them which will probably become the most important bottlenecks that the Chinese leadership will have to solve in the near future:

- **Unbalanced Industrial Structures** : although a process of concentration has taken place since the beginning of the 90's, most of the industrial sector is plagued with an irrational structure. According to official figures, there are 124 producers of TV sets; nearly every province has an automobile or a truck producer; the situation is similar in the textile

industry, and for consumer products. It is difficult to believe that 118 000 industrial SOE's will survive in the future, especially if China joins the WTO. Excess production capacities is the norm in the light industries sector: at the end of 1996 the utilization rate of production capacities among producers of TV sets, refrigerators, washing machines, air conditioners, radio cassette, tape, truck, camera, bicycle, video recorder was in the vast majority of cases below 50% ¹.

Table 1. Degree of Management Autonomy in SOE's

		% of enterprises declaring complete autonomy on decision making in the listed area
1	Selling	97
2	Production	96
3	Purchasing	94
4	Use of Retained earnings	78
5	Right to decide on organizational structure	78
6	Pricing	73
7	Wages and Bonuses	65
8	Right to hire workers	58
9	Right to manage personnel	55
10	Investment	47
11	Establishment of JV or mergers & acquisitions	40
12	Import and Export	39
13	Right to dispose of assets	37
14	Right to refuse non-regulated government charges	21

Source : World Bank, "China ; Reform of State-Owned Enterprises", Report n° 14924-CHA, Washington DC, 1996.

China's State sector is in a very paradoxical situation. A minority of enterprises have been able to adapt their technologies and their products to markets and to the competition coming from imports, sino-foreign joint-ventures and from the collective sector. They have been able to overcome administrative regional barriers, to develop a "virtuous circle" for investment where economies of scale and growing market shares generate sufficient cash-flow to finance further expansion and new products. But for the vast majority of SOE's, adaptation to markets and to competition has been very slow. Since the end of the 80's they have entered a "vicious circle": absence of economies of scale, small market share, obsolete technology, low cash-flow, high dependence on bank credit to survive. Most of them are small enterprises created during the Great Leap Forward and the Cultural Revolution when the Chinese leadership promoted regional and local self-sufficiency. They represent 80% of the total of SOE's and nearly half of the total employees in the State sector.

Now, it remains to be seen if the XVth Party Congress decisions will be followed by a large movement of mergers and bankruptcies. If this happens, it will be more the result of ex-post adjustment of firms boosted by competition forces than the implementation of a relatively efficient corporate governance system aiming at reducing costs of exit of firms by anticipating problems at the micro-level (Jensen 1997).

- Lack of Corporate Group internal control : As in other reformed socialist economies, increasing autonomy without a clear definition of property rights has led bureaucrats and managers to develop opportunistic behavior and insider strategies. Some have tried, and succeeded in diverting SOE's assets from the State sector towards collective and private

¹ *Zhongguo tongji nianjian* 1997, (China Statistical Yearbook p.455

sectors where investment returns are higher and the business environment less bureaucratic. It is difficult to have accurate data on this phenomenon. No statistics at the national level are available; bureaucrats and managers won't talk openly about this matter as such activities are considered illegal. Nevertheless, some case studies suggest that this phenomenon is very common : in 1995, a study in Shanghai revealed that on a small sample of SOE's, some managers admitted to have created nearly 5 enterprises in the collective and the private sectors (Kejijiaochazu 1995). Another case study in Shenyang city has also shown that this practice is used by a big majority of the State enterprises (Kernen 1997). It is also possible to find evidence in macro economic data: despite the fact that the State sector represents now only 35% of national industrial production, it remains the main consumer of capital in the economy with 70% of the bank credits and 60% of capital investments. The difference is huge and can't be explained only as it has been traditionally by reference to such costs as the social burden supported by SOE's or the inefficiency of their investment decisions. Part of this difference could be explain by the fact that part of the capital obtained by the State sector is actually used to finance its activities outside the State sector.

Concerning corporate governance, this phenomenon has led to the creation of very opaque corporate groups : except for the very few companies listed on the Shanghai and Shenzhen stock exchange as "B" shares or as Hong Kong "H" shares which are obliged to disclose information on their activities, most of the time there is no consolidated accountancy system, no real long term investment strategy, and no external control on their operations. This phenomenon can probably explain part of China exponential growth rate, but on the other hand, it is also responsible for the proliferation of speculative investment in for example the property market, the creation of excess capacities on consumer products made by small productive units, and probably the growth of bad debt supported by the banking system.

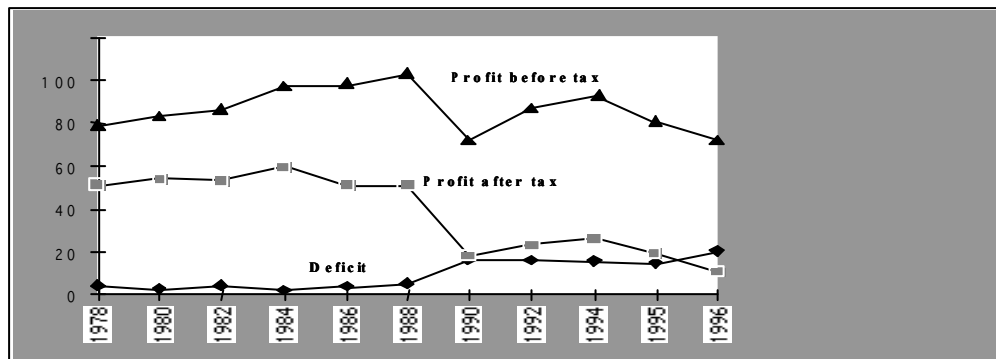
- Low cash-flow and development based on a high level of leverage : Chinese SOE's registered at the end of the 80's a rapid slowdown in their after tax profit. Since 1995 the total of losses has exceeded even the total profit after taxes (see chart 1). Productivity has grown much slowly than wages and social security payment, and enterprises have had to face important rise in raw material prices. Even if the situation is different among industries and enterprises as we have seen above, generally speaking, this situation has led to a deterioration of their cash-flow (which is already traditionally low in socialist economies) and to a higher dependency on the banking system.

This is particularly evident in respect of their working capital requirements: in a survey published in 1994, covering 124 000 state industrial and commercial enterprises, working capital requirements represented 91.5% of their *debts* (*Zhongguo shehuikexueyuan gongye jingji yanjiusuo* 1996). But working capital in China as in every socialist country serves to pay the burden of retirement pay and all the other social security benefits. Working capital is also very important in foreign technology imports. It is needed to pay a lot of complementary expenses which are not usually included in the budget of the purchase such as minor transformations and adaptations of the imported technology or expenses induced by the new technology in the production organization. The lack of working capital in this case is often one the main reasons explaining the poor assimilation of foreign technology in SOE's.

For fixed investment, government subsidies represented 60% of the funds for SOE's in 1979 but only 4,6 % at the end of 1996. On the contrary, bank credit has grown from 4% in 1979 to 24% at the end of 1996².

This evolution in enterprise financing structure has led to an impressive growth of debt/asset ratio. According to N. Lardy, the debt/asset ratio has grown from a low level of 11% to 85% at the end of 1995, with an acceleration since the beginning of the 90's (Lardy 1998). Furthermore, N. Lardy insists on the fact that this ratio is probably understated due to the unfounded pension liabilities of the SOE's, the overstatement of their assets and the fact that they don't take into account net debts to non-state firms. Even if we don't consider this, a ratio of 85% of debt/asset correspond to a ratio of debt/equity (which is normally used in market economies) well over 500% according to N. Lardy , that is to say an incredibly high level of leverage. In comparison, the South-Korean Chaebols which are usually blamed for their high level of leverage, had before the financial crisis an average of 300 to 400% of debt/equity ratio.

Chart 1. Trends in Profits and Losses in State-Owned Enterprises (Billion yuan at 1978 prices)



Source: Various issues of the China Statistical Yearbook

The reasons which explain this poor efficiency of the corporate system are relatively well-known. They can be found in the literature dealing with former socialist economies in transition and are normally directly related to three main factors which are in reality very much interrelated: the absence of a hard budget constraint for SOE's, the lack of a sound legal environment which regulates the business in the state sector and finally the lack of autonomous financial institutions able to exert an external control over the investment decision of the firm. But four different factors are particularly striking in the case of the Chinese state sector:

- **The low efficiency of the banking system.** Despite some efforts to implement some structural reforms, the banking system is still not capable of playing the role it would have to play in a developing country. The banking system is still heavily influenced and controlled by the political system both at the central and the local level. To a certain extent, it has replaced the State subsidies which used to finance working capital and investments of

² *Zhongguo tongji nianjian* 1997, (China Statistical Yearbook)

SOE's: budget constraint is still very "soft" for enterprises and policy loans to keep afloat enterprises heavily indebted are widespread. The banking system also lacks well-trained human resources capable of implementing a real credit risk policy towards enterprises. In general, no external financial institution has been able to exert any real pressure on the management of the SOE's. Only recently has the *de facto* central bank, the People's Bank of China, has been able to "harden" the budget constraint and curb the redundant investment of the SOE's through a tighter monetary policy. The Central Bank subsidiaries at provinces level should be closed down to be replaced by regional units in order to escape the grip of local bureaucrats.

- **Fuzzy property rights** : despite the decentralization process, too many administrative entities can still claim ownership rights on SOE's. This phenomenon has led to a situation where nobody feels responsible for the losses SOE's but where everyone claims to have right to use its assets. No institution or individuals is bearing the risk which normally accompanies to an investment decision but the most powerful actors of the state sector, mainly managers and bureaucrats, have become *de facto* owners of SOE's and have contributed to diverting SOE's assets outside the state sector. The monitoring of the SOE's assets has become so difficult under the "contract responsibility" system, that it constitutes probably one of the main factors which has influenced the recent reform package endorsed at the XVth Communist Party Congress in October 1997.

- **A low level of bankruptcy** : despite the existence of a bankruptcy law since 1986, the rate of bankruptcies has been maintained at a very low level considering that nearly one third of all SOE's are probably insolvent and that their restructuring is doomed to fail. The level of bankruptcies was too small until 1995 to constitute a real incentive to restructure SOE's. For all forms of ownership in China, the rate of bankruptcy remains particularly low at 0.06% compared to 1.1% in the United States³. From 1990 to 1993, 1287 cases of bankruptcies occurred in the state sector, 1625 cases in 1994, 2200 cases in 1995⁴ (other sources are 2348 cases for 1995⁵) and 6222 cases in 1996⁶; but in 1997, the number of bankruptcies has declined to 4498 cases⁷. This slowdown is particularly apparent during the second half of 1997 and raises again the difficult choice faced by the authorities between maintaining social stability and restructuring SOE's. Workers and bureaucrats are not the only one who would be happy to see fewer bankrupts. Banks which are the main creditors of SOE's are reluctant to let too many enterprises go bankrupt as they will have to write off from their assets too many (bad and irrecoverable) loans.

2.2. The Evolution of Corporate Governance System after the XVth Congress and the Limits of an "Insiders" Type Control

Among all the major State sector reforms undertaken after 1978, there still remained one which the authorities left alone: the reform of public ownership. Until the latest Communist Party congress in October 1997, this remained a taboo subject. China seems to be following a different pace from the other countries of the former socialist bloc. Instead of massive privatization, there is talk of (see insert n°1 for more details) transforming the SOE's into share-holding companies, with the share-holding being organized on a so-called co-

³ *South China Morning Post*, 06.02.1998

⁴ "Quarterly Chronicle and Documentation" in *China Quarterly*, n°149, March 1997, p.235

⁵ *South China Morning Post*, 06.02.1998

⁶ *Ibidem*

⁷ *Ibidem*

operative basis (*gufen hezuozhi*); the progressive withdrawal of the State, whose extent will vary according to the size of the enterprise; establishing financial holding companies (*guoyou konggu gongsi*) as subsidiaries of the central ministries of industry; and finally, introducing public share companies run by local municipal authorities (*guoyou zichan jingying gongsi*).

However symbolic the recent measures on ownership adopted by the 15th Congress may be, like most reforms since 1978, they can be interpreted in two ways which are not contradictory: either they represent the search for a compromise between what is politically tolerable and what is economically necessary, either it the recognition *a posteriori* of *un état de fait*: political authorities endorse and give a legal content to practices which have developed earlier in the most advanced provinces (Shanghai).

The impact on large SOE's will be limited

The Chinese government has announced on several occasions that it will retain a majority shareholding in large enterprises. these enterprises will receive a special allocation of resources to speed up their restructuring. Within this category a distinction should be made between enterprises which will continue to be considered as public utilities and those which will face competition. For example, among the 57 industrial conglomerates set up by a decision of the State Council in 1991 (to which a further 63 were added at the beginning of 1997 six of them are concerned entirely with the production of electricity.

These companies will remain under the control of the State and the Ministry of industry, reorganized as a single group or holding company (see insert, level 1). They will not develop in a competitive environment and will have very little say in fixing prices, or in production or investment decisions. Despite being in urgent need of restructuring, they will not really feel the effects of property rights reforms, except perhaps in terms of an improvement in the central ministries' decision-making process.

As for the large SOE's which will have to develop in a competitive environment (car manufacture, steel production, chemicals), it is also quite hard to envisage how the property reforms will have a direct influence on their restructuring. This is because the state will remain by far their biggest shareholder, and channels for making decisions will also certainly remain under the control of the bureaucracy. The central ministries, operating through their new financial holding companies (see insert) will keep these enterprises as their private preserve (Xu 1996). The best that the enterprises can expect may be some financial benefits from the State's withdrawal from the control of Small and Medium SOE's. The State will be able to concentrate its resources onto a smaller number of recipients. That could represent a positive aspect, if the signals coming from the state are reliable. These new funds must be invested in restructuring, and should not be considered as renewable annual subsidies, as is the case at present.

What role is to be played by the local state asset management companies in the medium and small SOE's?

In enterprises, in which the State retains a controlling interest, a close look should be taken at local state asset management companies which hold the power in their board of directors. On paper, and according to interviews we have conducted with members of these companies in Wuhan and Hangzhou, they wish to have an important say in industrial restructuring. In Wuhan, for example, the only State asset management company in the region has censured six managerial teams out of the 24 under its control. It has also facilitated the formation of conglomerates by withdrawing its financial stake in some firms and buying up others in order to reinforce its industrial strategy in the firms under its control.

Insert n°1 **Contents of reforms endorsed by XVth Party Congress**

Level One: Changes in the economic bureaucracy

The ministries in charge of various industries (electronics, machine tools, light industry, etc.) need to be stripped down. One part will continue to be concerned with administration and should deal with long term planning in the state sector. At a later stage these pared down ministries should be amalgamated into one large ministry of industry. The other part will discard its administrative functions, to become a financial holding company (*guoyou konggu gongsi*). Also at the level of the central administration, the Ministry of Finance's bureau for the management of state assets (*guojia guoyou zichan guanli ju*) is emerging from the shadows to take on real power in the management of state property. It is set above the ministries, and will become, in theory, the highest state institution in charge of state assets.

At the provincial and local level, the local industrial offices are to disappear more quickly than at the central level, but will take the same general form, with minor variations. The municipalities will set up a local management committee for state assets (*guojia guoyou guanli weiyuanhui*) which will be subordinate to both the municipality and the central state assets management committee in Peking. In each industrial bureau, a large section of the employees will relinquish their administrative status to become organized into industrial groupings or management committees for any given sector, and acting on behalf of the committee in Peking. And lastly, the remaining part, smaller in numbers, is to be amalgamated with one of the municipal economic commission.

Level Two: The development of state asset management companies

These state asset management companies (*guoyou zichan jingying gongsi*) act on behalf of the local state asset management committees mentioned above. They are the municipal governments' fund providers. But they also enjoy a considerable degree of autonomy. Their function is to manage the assets belonging to the state in those SOE's which have been converted into share-holding companies. So they must above all protect the current value of state assets. But they can also sell off a part or all of the assets under their control in a company. Whenever the sale of assets would result in a change in majority shareholding, they must seek authorization from the municipal state assets management committee. But that is not all. They are supposed to play a role in the restructuring of the enterprises. In their capacity as shareholders, and mostly majority shareholders at that, they are in control of the enterprise board of directors. The president of the board of director is a representative of the state assets management company, and is usually its director. So they have the power to nominate the manager of the enterprise, and as majority shareholders they oversee the general management. Its members are mostly former members of the local industrial bureau or economic commission, but they have relinquished their state functionary status (McNally 1997).

Level Three: Enterprises and principles of *gufen hezuozhi* and *zhuada fangxiao*

The main development affecting the enterprises themselves is their conversion into share-holding companies. This development is regulated by the company law passed in 1994. According to the evidence of experiments conducted in the different localities since 1994, and certain references made in Jiang Zemin's speech at the 15th Congress, it would seem that, leaving aside companies listed on the stock exchange, a "co-operative type of shareholding" (*gufen huozhi*) is being encouraged. There would be three kinds of shareholders controlling the capital of the SOE's: firstly, the state itself represented by state asset management companies; secondly, collective bodies which are usually subsidiaries or affiliated companies belonging to local administrations; and thirdly, employees and managers of the enterprise. Following the principle of "attending to the large enterprises and leaving the smaller" (*zhuada fangxiao*), the state will retain a majority stake in the country's large and medium SOE's, numbering around 15,000. As for the small industrial SOE's, numbering around 100,000, the leadership on several occasions has let it be understood that the state could withdraw from them quite rapidly. But listing on the Shanghai, Shenzhen, and Hong Kong stock exchanges (let alone New York, Singapore, and Tokyo) will only affect a very small number of enterprises, even though the authorities have often stated that they will speedily increase their numbers.

Accordingly, all SOE's should in due course, set up managerial and supervisory structures necessary for a share-holding company: such as a board of directors, a supervisory committee, regular audits etc.

The other major task facing the SOE's is the progressive dismantling of their provision of social services, like clinics, schools, transport, and so on.

However, it is still difficult to know whether they are going to become real agencies for industrial restructuring, along the lines of what happened in East Germany with the *Treuhandanstalt*, which coordinated privatizations and restructuring up until 1994 (Hirschhausen 1996) or in Poland, where the Government has set up fifteen National Investment Funds in charge of conducting both restructuring and privatization of State assets in their portfolio. Chinese companies retain much more power in the enterprises than they care to admit, particularly in their regulation of local competition, and in decisions over financing and industrial strategy. They should not simply "hang out a new sign" (*huan paizi*) while just going on as before behind their new official identity. In this respect, the experiment conducted in Shanghai, is the opposite of the one in Wuhan. C. MacNally has listed the setting up of 33 state asset management companies in Shanghai, the majority of which were former industrial bureau (McNally 1997). Their state asset

controlling function is limited to a single specific industrial sector. This is very similar to the definition of functions by sector, which was the norm before they were converted into state asset management companies. So Shanghai was certainly very quick to set up such companies, but the retention of the old sectoral organization, and the kind of control they exercise, gives grounds for a certain doubt over the degree of institutional innovation that they really represent. Here the Wuhan experiment can offer an alternative model for other Chinese municipalities. Wuhan has proceeded more slowly, since it has only set up one company of this sort, and plans to set up a second one before the end of the year. However, the assets of the 24 SOE's under the control of this company are not restricted to a single industrial sector. It took longer to set the company up, because the different industrial bureau had to be persuaded to give up the management of particular enterprises. But it would seem, from early impressions at least, that this case represents an important step towards breaking up the administrative divisions in industry, which have for so long stood in the way of China's reform of the SOE's.

It is crucial for the future of structural reforms to take into account how the sums raised from the sale of small and medium SOE's will be used. It is a question of deciding whether the state asset management companies are going to favor an industrial or a financial strategy. If the sell-off of state assets serves to provide new capital and a new structure to enterprises, then its effect may be considered positive. These state asset management companies would then disappear of their own accord, as the ceding of assets and the restructuring takes place, as happened in the case of East Germany's *Treuhandanstalt*. This was dissolved at the end of 1994, when all SOE's had been fully capitalized. But if Chinese companies favor a financial strategy, their role in industrial restructuring is open to question. What is meant here by a financial strategy? The companies might make use of the transfer of assets to set up an investment portfolio. The Wuhan state asset management company has already created a subsidiary with the same powers as the parent company: Of course, industrial and financial strategies are not necessarily opposed to each other. It is possible to imagine the state asset management companies slowly turning into institutions like the investment funds in certain East European countries. That is to say, that in a further stage in the privatization process, SOE's employees might sell their shares to these companies which, in the interest of maximizing the value of their share portfolios, would encourage the restructuring of the enterprises under their control. However, there is also the threat that the rapid development of opportunist financial behavior on the part of State assets management companies could be made at the expense of industrial restructuring. There are already disquieting elements in the present development of State asset management companies. In particular, judicial systems of control over their activities are very poorly defined. They enjoy a large measure of de facto autonomy, and at the national level, the central bureau of state asset management finds it difficult to exercise any control, given the increasing number of municipalities setting up such companies. There is a risk that local interests will become paramount. The cadres in charge are all from the former industrial bureau or local economic committees. Furthermore, there is only a very slim chance of developing co-ordination between these state asset management companies at the national level, which is worrying in view of Chinese industry's need for concentration, and for the transfer of capital raised from the sale of assets towards those regions which are severely affected by the crisis in the state sector.

Shareholding arrangements which do not encourage restructuring

With regard to the small and medium enterprises from which the state is going to withdraw, they seem to be heading towards shareholding by local insiders: consisting principally of the managers and employees of the enterprise, followed by the local governments represented by the state asset management companies, and finally collective bodies with links to either local collective enterprises or other local bureaucratic entities. This shareholding arrangement gives the controlling power to the enterprise management, even when employees hold most of the capital. It gives rise to a situation which is unfavorable to change, as can be seen from the experience of privatization in Russia since 1992 (Pohl et al. 1997). Naturally, some directors are very capable, and can take advantage of their new independence from the administration in order to embark on a bold series of reforms in their enterprise. But the majority of small and medium SOE's, which are those most affected by the crisis, are in need of external expertise, which usually comes about through the active participation of shareholders from outside the enterprise, whether in a majority or in a minority capacity. It can be foreign investors. But external shareholders can just as well be home-based investors, like a bank, an investment fund, another firm operating in the same sector, or a financial holding company. The important point is that such shareholders should have a certain expertise at their disposal, and that they should be determined to inject some dynamism into the enterprise. But enterprise managers, who have the most to lose, are able to develop many different strategies to block such initiatives from outside investors. They can pressurize the workforce not to sell their shares to outside investors, they can obstruct the raising of new capital, or if that is unavoidable, they can make sure that they buy back the majority of the new share issue.

The Chinese press provides many examples of enterprise management's eagerness to take full control⁸. Furthermore, with the exception of firms listed on the stock exchanges, matters are made worse by the fact that the workers are forbidden to sell their shares to outsiders. Unofficial unions are banned, and the employees are in a far weaker position to defend their rights than in Eastern European countries. The 1994 company law does indeed represent a step towards setting up a more transparent legal framework with respect to shareholders' rights, but as with all laws passed in China, the problem lies in their day to day application. Research into SOE's converted into share-holding companies prior to the 15th Congress shows up their many weaknesses: there is a failure by enterprises to report on their financial situation, a lack of respect for minority shareholders' rights, and a decision-making process without consultation with shareholders. In general, management councils are in fact councils for ratifying decisions taken by the managers in consultation with local bureaucrats (Freund 1997). In such a situation, transaction costs for a potential investor in a small or medium Chinese SOE's are still very high. This is particularly true for foreign investors. Apart from investors from Hong Kong or Taiwan who enjoy strong links with the local bureaucracies, they feel that their participation gives them no control whatsoever over the enterprise.

In conclusion, despite continuous reforms since 1978, the evolution of the corporate governance system is rather similar to the case of a blind man who, used to relying on his guide dog for his every move, suddenly, by some miracle of surgery, regained limited vision which allows him to see shapes and colors but nothing else. This, of course, is much

⁸ *Asian Wall Street Journal*, 17.10.1997

better than being totally blind, he can do away with his dog and take the initiatives to do what he wants, but he still makes a lot of mistakes and need someone to tell him where they are. It seems unlikely that China can rest content with the kind of property rights reforms that have emerged from the 15th Congress. These are a first step and a significant ideological break with the past. It is understandable that, for reasons to do with the political agenda and compromises between powerful actors in the state sector, the government wishes to handle the unavoidable privatization's at its own pace and in its own way. But eventually China will have to continue to improve its corporate governance system. If the necessity of introducing a new corporate governance is widely accepted, the difficult point is to choose a model which would give firms an efficient way of minimizing the social cost of restructuring, and at the same time leave the government with control of strategic industries. Although the model which will be implemented in China is more likely to result from some kind of compromise arising from the need to meet the above mentioned objectives, there is no doubt that review of recent experiences in transforming SOE's in market and transition economies can help to highlight some of the main issues relating to corporate governance and the restructuring of the SOE's.

3. Experience of Corporate Governance of Firms in Market Economies and in Transforming Economies

3.1. The Standard Approach to Corporate Governance System

Generally, the model of corporate governance to which specialists refer to is the standard model which is at work in big market economies and more particularly in the US and the UK. In decentralized and competitive markets, firms are controlled by external owners who take their decisions on the base of the information provided by capital markets. On these markets, property is fragmented and distributed among owners (individuals, banks, investment and pension funds). At first view, the large spreading of ownership among economic agents should lead a *de facto* control of firms by their managers (managerial control). Taking advantage of the asymmetric information bias, managers are in a position where they can develop their own strategy in terms of security, rewards, expectations; they can allocate some parts of profits to match these objectives instead of channel it to shareholders.

In an open economy, with a well functioning capital markets, this kind of behavior of firms can be easily counter-balanced even if shareholders are kept at arm's length of the daily routine. The information available on the stock market is sufficient to control firms and to take decisions if necessary. The valuation of assets on competitive markets can be a reward or a threat to managers even if they don't take advantage in the same proportion of the reward of the risks than shareholders do (risk adversity vs risk neutrality).

In reality, firms, even in developed market economies, don't behave as the theory explains it. The cost of information is generally high and there may be strong asymmetries in terms of access to it for different agents especially to shareholders are generally neutral as they don't invest enough to get the information and that they follow a portfolio strategy allowing to spread the risk on different kind of investments. So, corporate governance is a network of contracts between different agents, the shareholders, the directors, but also between the directors and the employees in order to respect the interests of shareholders. This contract integrates, of course, the transaction costs of internal and external coordination of companies.

The well functioning of financial markets which creates a strong pressure on firms is also a powerful device to discipline corporation: exit (Hirschman, 1970) might threaten companies and managers not doing well.

Besides external and managerial control, stakeholders may influence the choice of the firm by exerting their own power on the organization (unions, interest groups inside the company, suppliers and customers, etc.).

3.2. Anglo-Saxon vs. Rhenan and Japanese Capitalisms

In the literature on the control of firm, both the German and Japanese (and south Korean, to some extent) models of corporate governance have been popular at least for two reasons. First, because it was understood that it might be easier to set up this kind of model than to create *ex nihilo* a sophisticated financial market and market institutions to monitor firms. The other reason, maybe the most important, was that having a friendly bank in the center of an industrial complex might have some interesting advantages: direct access to more or less soft finance, escape to the hard budget constraint coming from the implementation of macro-policies; allow a longer period of time to restructure inside the group.

In terms of corporate governance in market economies, the US (and UK) model is generally opposed to the German and Japanese ones where the distribution of shares among shareholders is more concentrated among few banks or financial investors. Those are in a position to control more effectively the behavior of companies by being appointed to the company board. Instead of exit, as it is the case in volatile capital markets, representatives of banks at the board of companies can have their voice heard (Hirschman 1970). As a comparison, first institutional investors in General Motors, Mercedes-Benz and Mitsubishi control respectively 2.5, 25 and 54% of assets. There are nevertheless two main differences between the German and the Japanese model: in the first one, banks exert a real control and leave on firms' decision concerning investment projects; banks are in competition on capital markets. If the German model has helped to build up and develop big *Konzerns*, efficiency has always mattered both in terms of market strategy and financial control. The peculiar relationship between banks and companies may reduce transaction costs on financial markets in providing capital at a lower cost by reducing intermediaries but it limits room for insiders' strategies. On the other hand, the efficiency of the German model, as in the case of the US, is that big companies follow industrial strategies both in terms of specialization and organization. Big enterprises rely heavily on strong externalized organizations, that is very competitive medium size enterprises.

In Japan, the corporate governance is slightly different both in terms of control and strategy (Richet 1998). There is a specific relation between banks and corporations (Aoki and Dinc 1977). One bank acts as the main lender to a corporation; the same bank can be also its main shareholder. The bank provides the necessary financing to the company on the basis that the company can assure the expected level of return on investment to the lender. As a by-side effect, the bank as a lender is generally neutral and there is no trade off between the bank as a shareholder and the bank as a lender. Another important point in the relation between the bank and companies it controls is the existence of a subtle co-operative game with pre-threat between both sides. For instance, the corporation knows that it can draw cash from the bank up to its capability to produce the expected level of return without supporting a direct control from the bank. Otherwise, the bank sends a representative to the board to supervise the behavior of the company; the bank can also, if the situation is worsening, replace the CEO of the company. This is an ultimate measure which has bad consequences for both parties. In Japanese companies, the leadership is exerted by

prominent people who generally end up their career after having performed different positions inside the company. In case of removal, it is considered as an humiliation for the members of the companies and also as a fear because, they know that overcoming the leadership by somebody from the bank could have very negative effects on employment. For the bank, contrary to what would be the case in Western companies, turning around a company after sacking the leadership can have negative effect on the image of the bank in the future. It's generally the reason why both parties are intervening before attaining these limits. In the meantime, if the financial constraint is not too high, and the prospects concerning future returns are good, Japanese firms are *de facto* leverage companies controlled by their managers able to generate a sufficient amount of cash.

Both German and Japanese models of corporate governance (with, to some extent, the Korean model) have attracted some interest in transforming economies mostly because reformers see one aspect of the model: how to protect enterprises from real financial pressures and from bankrupt in gaining support of banks associated to industrial groups. Once again, even if this model can give some independence to firms, market and financial competition in Germany and in Japan have still existed and it is up to a certain level that firms can put away financial pressures. Another point that is to be mentioned is that both in Germany and in Japan, the deregulation of financial markets are beginning to have some impact on the behavior of firms by entailing the specific nature of the relationship between banks and corporations.

3.3 French State-Owned Companies and Privatization Strategy

Generally, in the literature on transforming economies, few interest has been paid by scholars and specialist on the French experience of privatization and corporate governance although it contains some interesting features. France, for many decades and until recently, had an important State-Owned sector, mostly in infrastructures, basic industries, military equipment, chemicals, telecommunications and banking. The existence of a huge State-owned sector (with up to 30% of the GDP in the eighties) can be explained by different factors: the role of the State in the development of a modern economy starting from the *Ancient Régime*, and consequently, the existence of a very competent class of civil administrators (bureaucracy) able to expend its skills among different sectors of the economy, the market failure in some sectors (that might be caused by State interventionism: for instance, the over-development of the telecommunications comes from the former lack of interest of the State bureaucracy for this sector up to the beginning of the Seventies), the political choice of anti-capitalist parties which wanted the development of the State sector out of the influence of markets; the political will to implement strong industrial policies in the sixties to catch up advanced technologies or to build up strong industrial bases for the sake of national independence. State intervention, as a whole, has had a very positive impact in terms of growth, welfare, employment, innovation.

Curiously, the French corporate government structure of SOE's have received little interest both from specialists of the transition and from decision-makers of transforming economies although that this model seems to suits the aims of several transforming economies, at least in the first stage of their transformation. This model, which emphasizes on the separation of ownership and management, has, in the last period, *de facto* 'privatized the management': it

has given autonomy to manager for almost decisions except giving away assets. Even, for the *abusus fructus*, the French government representatives on the Board of companies, has always followed propositions made par the management (for instance, acquisition of French foreign subsidiaries, or mergers).

Globalization, the European integration and declining returns of big SOE's have pushed governments to change its relations towards State-Owned enterprises in several ways. After the partial failure at restructuring State-Owned companies which has followed the last nationalization of private assets in 1982-1983, the government has changed the rules by pushing SOE's to find their own financing on capital markets, by issuing investment certificates (similar to equities without vote rights), to develop strategic alliances with privates companies, to acquire private companies abroad, to open up its capital to private companies and banks to a certain level. These companies had also the right to lay down redundancy workforce.

The next step has been the implementation of a privatization programme in the second half of the 80s. The aim of the government was threefold:

- first, it was looking for cash by the selling State assets in order to raise money to reduce the public debt;

- it wished to increase the so-called “ popular capitalism ” in spreading almost 50% of shares among the population,

- it aimed at stabilize the ownership by selling assets to strategic investors, that is investors that were committed at least during some years to retain this new acquisition in their portfolio. The majority of ownership had to be French associated to minority European investors. The government wouldn't sell assets to foreign investors. As the French capital market is quiet narrow (compared to the UK market, for instance), the Government looked for core investors, that is investors which had an interest in the business and that could gang up and bring in the necessary capital. The government had its stock of assets evaluated by different audit companies which came out with different prices value . Interestingly, a company as Saint-Gobin (glass maker) had a different of almost 17% between the higher and the lower evaluation, although that the company has been nationalized only four years. This demonstrates the difficulty to appreciate objectively the future value of an asset, even in a market economy with almost quiet complete information available. Systematically, the government has selected the lower price to sell shares in order to attract potential investors (the population) and to force them to keep their share after the first trading on the stock exchange as the price of shares would increase at least in the short run.

As a consequence, this way of giving away public assets has a positive effect regarding both the distribution of assets among the population and strategic owners. But, concerning this last points, different critics have been made as the selling out of assets to selected strategic owners has, in fact, locked up the control of firms among few strategic investors (the new ‘50 familles’), preventing the entry of competing investors. A kind of cross-control of shares have resulted from this policy. The need of capital and merger strategies followed by European companies has recently contributed, to some extent, to unlock the control of assets by the original post-privatization owners.

D - Transforming Economies: Restructuring and Privatizing State Assets and the Building Up of New Corporate Structures

If mass privatization are not yet on the agenda and if the political and economic environment might differ from the present situation in China today (EBRD 1997; Estrin 1994; Pohl et al. 1997; Woo, Parker and Sachs 1997), there are some interesting clues that can be drawn from the experience accumulated during the last eight years in Eastern Europe concerning the impact of redistributing assets on the behavior of firms. First, privatization in this area took place amidst deep institutional changes and, notably, the building up of new market institutions (enterprise law, bankruptcy law, law on competition, anti-trust, law on foreign investment) and sometimes very severe macro-stabilization policies.

Fundamentally, there has been two ways of privatizing State assets, with different outcomes in the short run both in terms of concentration of property, speed of restructuring, and corporate governance. The first way followed (or privileged as the use of other methods has also taken place) by some countries has consisted in giving away the State assets to the population using the voucher schemes. The State, through this procedure, has transferred the biggest part of the property to the population, either to all citizens (external privatization), either to workers of companies being privatized (internal privatization's). Although there is an important ethic content in this policy (restitution to the population the capital that has been accumulated by the Party-State for decades), this policy has had two shortcomings at least in the short run (even up to now). First, it brings no money back to the State that could have been used for alternative purposes (reducing foreign and domestic debt) or to capitalize remaining enterprises that were not to be privatized now. Secondly, the large spreading of ownership among the population, for the sake of creating a so-called "popular capitalism" has had a counter-effect in terms of control: *de facto*, newly privatized firms through this system, became managerial enterprises, under the hands of managers often with no real understanding of the new financial and market environment. On the other side, it took time for new owners to become familiar with the new financial market and more precisely with the market for corporate control. This has opened the way to opportunistic behavior of managers and intermediaries who have tried to take advantage of this situation. The recent collapse of the Czech model, in a way, is a good example of the shortcoming of this strategy. In Russia, the distribution of assets to managers and workers has also created a *de facto* managerial capitalism favoring insider strategies by top managers who have succeeded in getting most of the shares for themselves. As an outcome, this mode of privatization has delayed the process of adjustment; firms have tried to escape to the external control and to take sharp measures when it was necessary. Where investment funds have been created like in the Czech Republic, their lack of own capital has led to the concentration of these Funds and has facilitated their control by State-Owned banks which, on the other hand had a very limited knowledge of controlling enterprises. Banks have been faced to the trade off between, their two jobs: get back the money lent on the one hand, in order to provide new credits to their clients and to wait for the maturation of investments after supporting a high cost of restructuring on the other. It is also important to notice that the bad debts accumulated by companies and supported by banks have limited their ability to put on a strong financial pressure on them and, in the same time, have limited their capability to bring them new loans. Finally, this mode of privatizing has brought in no fresh capital, the thing that enterprises needed the most with managerial expertise. The second way followed by some transforming economies has consisted in selling out State assets at

market prices (either at book value, either after evaluation by foreign audit companies) through bids or through direct sales. For governments which have followed this path, they were following at least three aims:

- bring in fresh capital that was missing to restructure firms,
- speed up the restructuring of firms with a new management and a new corporate structure
- have access to Western markets through exports.

Table 2. Different Types of Privatizing State Assets in Transforming Economies

	Internal	External
Selling	Stock options Discounted prices To: Managers Workers Mostly experienced in: Slovak Republic	Direct Sell or through Biding To: Households Domestic Companies, Investment and Pensions Fund Foreign Investors Mostly experienced in: Hungary
Giving Away	Free Distribution or Symbolic Price Charged To: Workers Managers Mostly experienced in: Russia	Free Distribution or Symbolic Price Charged To: All Citizens Mostly experienced in: Czech Republic Bulgaria Romania

The control of firms by new owners, mostly foreign investors, had a direct impact on restructuring. Companies that have been the most efficient in the area have been greenfields companies controlled in majority or even totally by foreign investors; then brownfields - a mix of acquisition and greenfields, then joint-ventures and , finally, enterprises acquired by domestic owners. Another important impact of Foreign direct investment has been the setting up of new start up companies through the spin off created by new foreign firms. As restructuring means unbundling and externalization of some assets of big enterprises, it has expended the number of Small and Medium size enterprises. In the long run, after a try and error process, after the exit of bad enterprises or the shutting down of businesses without markets and after banks have solved their bad debt problems and have also restructured, a stronger external control is growing in the region along with the development of more efficient financial markets.

4. Lessons from International Comparison for Further Reforms in China

Which kind of lessons can be drawn for China from this international review of different corporate governance system ? We should be very cautious when we try to answer this question. China can't expect to pick up one corporate governance model and implement it on the spot in its state sector. This could be dangerous for China and could bring more damages than benefits. There are various reasons for that:

- **Corporate governance system are not like devices that can easily be transported from one country and adopted by another.** Corporate governance system involves institutions like banks, financial organizations, enterprises but also bureaucrats; rules like

the legal framework governing equity purchase, shareholders rights, financial institutions or bankruptcies; expertise and know-how which enable people and institutions to exert their rights. Furthermore, institutions, rules, know-how are interrelated in a specific manner which form the idiosyncrasy of each system we have described above (Anglo-Saxon, German, Japanese, French). It is difficult, most of the time impossible, to copy and create one of the most apparent part (let's say stock exchange) without the other parts (in that case the fact that shareholder rights are well protected, or the existence of an efficient bankruptcy law) which create the efficiency of the entire system (the Anglo-Saxon corporate governance system). For this reason M. Aoki insists on the fact that the institutions and rules on which the Anglo-Saxon model is based are not present in former socialist countries or need to go through a process of modernization before being able to perform effectively their role (Aoki 1995).

- The logic of each corporate governance system is also a result of history. For example, the establishment of the so-called "main bank" system in Japan is deeply rooted in some 2nd world war and post-war events in Japan like the nationalization of banks during the war, the breakdown of the family capitalism system by the American occupying forces and limits put by the State on equity-control (Aoki and Dore 1994; Aoki and Patrick 1994; Fruin 1994; Kim et al. 1995). Implementing the core feature of the Japanese main-bank system in China without any analysis concerning the current state of the public sector could worsen its situation: on one hand Chinese banks are not in a good financial shape, policy loans are widespread, and they do not enjoy a lot of autonomy from the central and local political forces; on the other hand, SOE's are not entirely market driven organizations and the legal system ruling business environment is far from being perfect. In this context, the implementation in China of the core feature of the Japanese main bank system would not produce the same result as in Japan and would probably perpetuate a soft budget constraint for the SOE's and aggravate the level of bad loans in the balance sheet of the main bank.

- Some core feature of corporate governance system can also evaluate, or simply disappear under external pressure or after some evolution in the political structure.

Again, if we refer to the Japanese main bank system, it has been recently criticized for its poor efficiency to govern Japanese enterprises since the beginning of the 80's. When enterprises are highly leveraged as it was the case until the end of the 70's, the main bank got a lot of incentives to monitor investment choices, profitability and the management of the firm. But, when firms became "rich" at the beginning of the 80's and started to rely on their own cash-flow to finance investments, the main bank didn't play its usual monitoring role on firms. According to some tenants of the agency theory, this "free cash-flow" without external control created an important agency cost simply by the fact that the return on investment requirements were not anymore sufficiently market oriented. Managers who had a complete control on this "free cash flow" were not able to recognize in time sectors plagued by overcapacity and return on investments has been declining progressively since the mid-80's for Japanese firms (Jensen 1986; Kaplan 1997; Watanabe 1998). For these reasons, some important features of the Japanese corporate governance system will have to change drastically in the near future. The South Korean corporate governance system that the Chinese leader are so keen to follow, will probably know the same fate.

Nevertheless, given these limits and precautions, we think that some interesting lessons can be drawn from former socialist countries and industrialized capitalist economies:

- There is no restructuring policy viable without the development of a strong financial constraint on firms: This could come from a non-inflationary policy carried out by the

central bank but this should be also complemented by a sound banking system. Even if the banking system in China is in a poor situation, there is room for big improvements with relative small reforms. Corporatization and listing of banks on the stock market or a progressive opening of the financial market to some foreign institutions could provide a sane pressure on commercial banks to reform their activities (Lardy 1998; Qian 1995). Nevertheless, in the mid-term, it raises the question whether the Chinese government will tolerate a much greater autonomy of banks from the political power and the possibility to have some really independent financial institutions (domestic and foreign) operating in China.

- There is a necessity to promote active investors in the capital of the new corporatized SOE's: active investors could be domestic or foreign financial institutions, enterprises, individuals who are committed to monitor and to be involved actively in the restructuring of newly corporatized SOE's through a minority stake in the capital of these enterprises. This is to counter-balance the effects of an "insider" control which like in other former socialist countries, is probably going to emerge in China. This is particularly important for big SOE's which will be corporatized but will probably remain under State control. It would be helpful if the government could inform these enterprises that it would be prepared to privatize them at a later stage in the reform process, in order to reinforce the new signals it is sending out to them. These enterprises should progressively familiarize themselves with a control carried out by financial markets. In this context there is a need to continue to implement new reforms concerning the legal system especially to protect the rights of minority shareholders (but who could be active), to allow a good functioning of the board of directors, to put pressure on these enterprises to have a better disclosure of their financial situation and a better transparency on their operation. In this respect, there are two interesting points in the French strategy which might be interesting to consider in the light of the experience followed in China: the first one is the fact that a compromise between massive or partial privatization and the emergence of active investors is possible. It is possible to distribute part of the assets, through sales, to the population willing to hold shares and secondly to design a model to sell the other part of the assets to domestic companies which remain tied up for a while with the obligation to fulfill some engagements such as not to sell assets before a certain time, to show up a business plan concerning the coming years following the purchase to gather sound investors committed with the business. The second one is the fact that the state could also keep some "golden shares" in the capital of big SOE's operating in some strategic sectors (infrastructure, military) which give him the possibility to put its veto in an operation like the transfer of control to a foreign company.

- The large privatization of assets of medium and small size enterprises, along with the development of an efficient banking system should play a major role in disciplining the financial market. The success of the Chinese economy in the two last decades has strongly relied on the competition on product markets and less on capital markets. Now, at the new stage of the reform, competition on financial markets should play a major role and exert the necessary pressure on big SOE'S as the experiences accumulated abroad show.

- There is a necessity to improve the way board of directors are working in order to improve the internal control (Jensen 1997): the current law should be upgraded and fully implemented. But along with the necessity to have strategic external investors taking part to the board of directors as we mentioned above, there should be a diversification of the member of the board of directors; members should come from outside the firm but well informed on the company and the sector in which the company is involved. It is preferable that the CEO does not cumulate the position of president of the board and the agenda of the

meeting should be kept by the president of the board. Rights for shareholders to bring an action against the CEO of the firm should be also granted.

- Even if this would come only as an indirect support to reform the corporate governance system in China, **there is the necessity to upgrade the competition policy and to reduce the cost of exit in industries.** Although competition on product markets has grown very quickly since 1978, there is no formal competition policy in China. Chinese leadership will probably have to think about this aspect especially if they want to promote big industrial groups. The cost of exit in the industry is still relatively high in China. Many things remain to be done to overcome provincial administrative barriers, to promote mergers, to facilitate geographical mobility for workers leaving in depressed industrial area, to establish a sound social security system, but also to recapitalize banks in order to write off bad loans and to raise their assets. All these factors will facilitate the exit of thousands of SOE's which have literally no future in a market economy.

- Last but not least, there will be in the near future **the necessity to guarantee a better representation of workers and to set up institutional channels for collective bargaining:** restructuring SOE's will lead to drastic changes in the value added sharing and in the establishment of a very hierarchical management organization in the firm as many examples of already corporatized SOE's are suggesting. Many case studies show a shift from one extreme (workers reading newspapers, stealing raw materials (Kernen 1997)) to another (high degree of hierarchy and discipline, harsh working condition (Zhao and Nichols 1996)). At the same time, as Chinese leadership wants to enter in high technology industries, it will be difficult in this context to escape from new forms of institutionalized social dialogue in the Chinese society. South Korean and Taiwanese or even the Japanese situation (all of them are much more relevant examples for China than Singapore) are powerful examples of this evolution. Corporate governance will be greatly improved with the establishment of flexible and negotiable contracts (in Williamson's sense) between management and workers in the organization (Jensen 1997). The earlier it is done, bigger are the chances to escape conflictual situations which normally lead after a few years to the establishment of very rigid explicit contracts in the favor of workers, which become difficult to renegotiate when a firm and a country need to adapt their structure to a new economic environment. The past 30 years of South Korean industrial development are again a good example of this negative impact of authoritarian political regime (Clifford 1994).

In conclusion, we think that in this context, flexibility and variety are the best options for China. No single foreign model seems able to answer to all types of problems faced by SOE's. Chinese policy makers should resist the temptation to follow blindly one model only because they think it would be the most suitable to preserve a political *status quo*. The economic crisis in Asia especially in South Korea and Japan provide powerful incentives for Chinese leadership to speed up their reform in SOE's, in the financial system but also to draw some lessons on the negative parts of the model of corporate governance of these two countries they wanted to follow before the crisis. They should also bear in mind that even non Anglo-Saxon corporate governance systems like in Germany, Japan or in France are (or will soon, especially in Asia) adopting rules and practices that they have during a long time refused to implement. These corporate governance systems are probably becoming more hybrid and have a tendency to adopt features from the Anglo-Saxon model, especially concerning the importance of the financial market to monitor firms. So, there is the necessity for China to work on different fronts at the same moment (stock exchange, banking system, legal system), which makes the task not easy to carry out. But given that it is probably the soundness of future economic growth which is at stake, we think that the

different actors involved in this reform will push forward to speed up the reform in the right direction even if it has some implications on the current articulation between politics and economics.

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Actual and Potential Comparative Advantages of Enterprises in Central European Countries in Transition and their Utilization in East-West Interenterprise Relations Developing in Europe¹

J. Sereghyová & col.

Introduction

In the first half of the 90s the attention of policymakers as well as of members of the business community of countries in transition was focussed on the growth of the volume of their international relations - mainly on their ability to increase industrial co-operation with and exports to the European Union.

This was of major importance at that time, for the inability to achieve such a growth would have caused in these countries - after the collapse of the COMECON and the subsequent loss of their eastern markets - such an enormous underutilisation of capacities and such a dramatic increase of unemployment, that it might have caused highly undesirable shifts on their political scene which might have jeopardized even the transformation process going on in their economies.

But after several years in which the pattern of international relations of their enterprises with the West (the commodity structure of their exports and the position they had assumed in industrial co-operation) had crystallized and become more „transparent“, concern about the perspectives of these relations began building up - as yet merely in their academic community (much less so in economic practice). This happened not only because this pattern seems to be far removed from that which theoreticians had expected to develop - with regard to the technological level of these countries - but also because - due to ongoing changes in their economies - the sustainability of this pattern is decreasing rapidly.

To treat these issues „in toto“ would mean overreaching the subject-matter of our presently conducted research project by far. Nevertheless, the targeting of our analyses on the content and on specific features of East-west interenterprise relations enables us to make a modest

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contribution to the clarification of these issues. This was the aim of the following paper, in which we have tried to give an outline

- of the „revealed“ comparative advantages of individual CECTs, such as can be pinpointed by observing the structure of their exports to the West;
- of the motivation of EU-based companies importing their products and/or co-operating with CECTs-based industrial enterprises, which is underlying the manner these „revealed“ comparative advantages are utilized at present;
- of circumstances and developments which make the prolongation of the pattern of these interenterprise relations unsustainable in the medium-term;
- of alternative approaches to developing „potential“ comparative advantages of these countries, which might not only lead to a substantial increase of the effectivity of their international relations, but might prove to be conducive also to an appropriate incorporation of their enterprise sphere into European corporate structures.

1. Revealed Comparative Advantages of Central European Countries in Transition

The spectacular turn-around of foreign trade of Central European countries in transition from East to West, which had been effected already in the first years of the 90s., caused economists to overlook, that the commodity composition of their exports is - even after half a decade - still mirroring the structure of their economy, such as it was formed in command-economy times. The predominance of labor intensive, energy intensive and natural resource intensive products in their exports - which is depicted in the following table - is thus to a considerable extent to be regarded as a legacy of the past, as the consequence of the urgent need of their enterprises to utilize capacities established in the past - at least as long as new capacities are not built up.

As can be seen from this overview, the share of food-products in exports decreased in all these countries. This was caused not only by still persisting trade-political barriers to imports of these products to the EU, but also by an overall „slimming down“ of their agricultural production. What is important with regard to the subject-matter of this paper is the fact, that the share of raw materials and fuels in their exports decreased only marginally, and if we add to it their exports of chemicals, which consists to a relatively high degree of basic chemicals, it has in fact increased.

In the first years of the 90s the growth of exports of finished products had been lagging behind in these countries, even in real terms. But since 1992 their exports of machinery and consumer goods had been expanding spectacularly. In the case of machinery this was partly due to foreign capital participations effected in their automotive industry², which had opened the way to the export expansion of joint ventures established in this branch.

² it is mostly stressed, that it were foreign investments which caused this growth of exports. But - as our indepth research revealed - investments financed by foreign investors were relatively rare in these newly established joint venture. Thus the increase of their export-performance was due mainly to improvements of the quality of their products, achieved with the aid of technology transfer - as well as to the fact, that these new alliances gave to these CECTs based enterprises access to distribution-networks operated by their foreign investor, that in this manner their sales-possibilities in market economies increased.

Partly it was caused also by the rapid growth of outward processing traffic, conducted between numerous enterprises operating in their engineering industry with West European companies. In the consumer-goods industry - mainly in the production of textiles, clothing, leather-products and furniture - more than half of the above mentioned increases of the volume of exports was due to these OPT relations. From this can be concluded, that even in knowledge-intensive branches it were mainly labor-intensive low-value added products, which experienced the most pronounced growth of exports.

Table No. A Commodity structure of exports & imports in Central European countries in transition (Shares and growth rates in per cent)

	Exports					Imports				
	Structure		Growth rates			Structure		Growth rates		
	1992	1995 a	1993	1994	1995	1992	1995 a	1993	1994	1995
Czech Republic (c)										
Food, beverages and tobacco (0+1)	9	7	32,6	-9,6	22,4	7	8	21,1	31,0	28,5
Raw materials except fuel(2+4)	7	6	43,9	22,5	7,5	6	6	9,3	13,6	43,1
Fuel products (3)	6	5	65,2	-1,6	8,2	15	10	-11,3	4,8	26,2
Chemical products (5)	9	11	55,0	14,1	27,2	10	14	52,3	26,6	45,8
Machinery and transport equipment (7)	25	25	63,6	1,3	16,7	41	35	8,1	12,8	44,2
Other manufactured goods (6+8)	44	46	44,7	13,2	22,6	20	29	74,9	19,5	44,7
Total	100	100	50,5	8,0	19,6	100	100	24,0	16,4	41,2
Hungary										
Food, beverages and tobacco (0+1)	22	19	-27,2	16,6	26,4	5	5	15,1	31,0	-6,3
Raw materials except fuel(2+4)	7	5	-16,9	9,9	11,7	4	5	-10,2	42,3	25,4
Fuel products (3)	3	3	-2,2	18,0	-5,5	15	12	0,4	2,7	3,2
Chemical products (5)	11	13	-6,6	11,5	34,1	13	15	4,2	23,8	27,1
Machinery and transport equipment (7)	21	25	-3,6	27,7	13,8	30	30	38,4	8,2	-2,8
Other manufactured goods (6+8)	36	34	-22,6	22,3	13,6	33	34	1,9	23,4	19,4
Total	100	100	-16,8	20,1	17,3	100	100	13,1	16,2	9,6
Poland										
Food, beverages and tobacco (0+1)	13	9	-12,2	27,7	7,7	11	9	17,2	3,9	25,6
Raw materials except fuel(2+4)	9	5	-29,8	3,0	29,2	6	6	1,7	29,2	39,6
Fuel products (3)	11	9	-2,8	14,0	25,4	17	9	-12,3	-4,0	20,1
Chemical products (5)	9	8	-15,0	20,6	58,7	13	15	16,9	26,4	41,8
Machinery and transport equipment (7)	19	20	17,6	15,0	36,5	30	29	17,4	11,8	39,3
Other manufactured goods (6+8)	39	49	26,3	27,8	38,8	22	31	53,1	20,3	38,9
Total	100	100	7,2	21,9	34,4	100	100	18,4	14,5	36,0
Slovakia (c)										
Food, beverages and tobacco (0+1)	8	5	15,3	5,3	26,8	5	8	176,4	-4,4	33,4
Raw materials except fuel(2+4)	6	5	32,0	27,0	35,8	8	6	20,4	4,5	41,1
Fuel products (3)	1	4	789,9	15,8	21,2	27	18	27,9	-6,7	18,3
Chemical products (5)	11	13	57,2	31,2	41,3	10	14	94,8	16,6	47,3
Machinery and transport equipment (7)	18	18	60,2	20,2	29,0	33	28	48,5	-4,9	38,1
Other manufactured goods (6+8)	57	53	33,3	23,8	34,9	17	26	135,7	8,3	32,9
Total	100	100	45,3	22,5	33,5	100	100	67,3	0,9	33,6

Note: Shares may not total 100 because SITC 9 (unclassified commodities) is not included.

a) January-September. b) January-September over same period of 1994. c) Growth rates for 1993 are distorted by the inclusion of the „new“ trade between the Czech Republic and Slovakia in the trade measure for 1993, but not for 1992.

Source: „ Economic Outlook of Europe in 1995-1996, UN. Geneva, 1996

It would be far too simple to attribute these untoward developments of the structure of exports of individual CECTs, as well as the proliferation of the simplest types of industrial co-operation with foreign partners which could be observed in the first half of the 90s, merely to the above mentioned legacies of the past. They were also due to the fact, that

products originating in these labor-and energy-intensive industries were in relatively high demand in west Europe - especially in the time of the upward swing of the business cycle, which set in here in 1993. They were caused to an increasing extend also by the fact, that on the one hand the existence of largely underutilized machinery in these branches, whose depreciation had been concluded long ago (and therefore could be used practically free of charge), together with the extremely low wage-levels persisting in these countries, were regarded by the business community in developed market economies as the main comparative advantages of these countries and increasingly utilized as such.

This assumption has been confirmed also by a statistical analysis (conducted by the UN/ECE) which had pinpointed the comparative advantages of these countries, so as they are revealed by the commodity composition of their exports to the European Union.

Table No. B Eastern Europe's exports) to the European Union: indicators of revealed comparative advantages. (Indices, shares and growth rates in current dollar values in %)

	RCA index b)			Share in total EU imports of a given commodity group c)			Average annual growth rates		
	1989	1992	1994	1989	1992	1994	1990-92	1993-94	1990-94
SITC Rev. 3 commodity groups									
Food and beverages (0+1)	1,92	1,41	1,02	5,3	5,5	4,9	9,3	-5,4	3,2
Live animals (00)	-	-	-	37,9	53,0	53,0	8,4	-3,7	3,4
Meat and meat preparations (01)	-	-	-	23,5	19,1	16,8	1,2	-9,7	-3,4
Beverages (11)	-	-	-	9,6	11,5	10,6	31,8	4,3	20,0
Crude materials (2+4)	0,97	1,10	0,82	2,6	4,3	4,0	15,5	-0,3	8,9
Fuels (3)	0,95	0,32	0,32	2,6	1,2	1,6	-16,	6,0	-7,8
Coal, coke and briquettes (32)	-	-	-	8,4	10,8	13,9	18,4	3,9	12,4
Chemicals (5)	1,24	1,16	0,94	3,4	4,5	4,5	22,1	4,6	14,8
Fertilizers, manufactured (56)	-	-	-	7,4	17,8	14,9	38,4	-4,4	19,4
Machinery and transport equipment (7)	0,40	0,54	0,65	1,1	2,1	3,2	38,4	26,0	33,3
Manufactured goods (6+8)	1,48	1,72	1,71	3,9	6,7	8,3	31,8	15,0	24,8
Cork and wood manufactures (63)	-	-	-	5,5	10,3	12,0	40,1	16,3	30,0
Iron and steel (67)	-	-	-	8,5	13,2	15,4	17,3	13,1	15,6
Non-ferrous metals (68)	-	-	-	3,4	6,5	9,1	19,3	22,9	20,7
Manufactures of metals (69)	-	-	-	3,8	9,2	11,2	52,8	14,1	36,0
Prefabricated building fixtures, etc.(81)	-	-	-	4,6	11,6	14,0	73,6	17,0	48,3
Furniture, bedding, etc. (82)	-	-	-	21,8	24,8	28,6	23,6	14,4	19,9
Articles of apparel, etc. (84)	-	-	-	6,7	10,0	12,8	36,9	15,0	27,7
Footwear (85)	-	-	-	7,2	12,4	14,2	44,2	11,1	29,9
Non-classified (9)	0,22	0,23	0,28	0,6	0,9	1,4	22,8	-6,7	10,0
Total	-	-	-	2,7	3,9	4,8	22,5	12,3	18,3

a) Six east European countries: Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia.

b) The revealed comparative advantage (RCA) index is calculated as the ratio of the share of a given commodity group in east European exports to the EU to the share of the same group in total EU imports from third countries. A value greater than one indicates that the east European country group specializes more than other non-EU countries in exports of a given product to the EU.

c) Imports from non-EU countries only.

Source: UN/ECE secretariat calculations, based on COMTRADE Database, as reported by the importing EU countries.

These data prove, that even in the mid-90s exports of CEECs to the EU still consisted of a limited range of raw-materials, agricultural and industrial products, among the latter mainly of clothing, footwear, wood-and steel products. Alone two of all these items -i.e. exports of clothing and footwear - accounted for more then 17% of overall exports of these countries to the EU, other types of the above mentioned „sensitive“ products for another 30 - 40%.

Instead of the anticipated deceleration of their exports of energy-and raw-material intensive products (especially of metals, of non-metallic mineral products, of primary wood-products and of plastics in primary form) to the EU, the volume of these exports continued to increase, in some of these countries (mainly in Poland and Slovakia) at a relatively high pace. As mentioned above, in knowledge-intensive branches of the manufacturing industry (SITC 6,7 and 8) the deterioration of the production-and export structure is proceeding „under the surface“, in the guise of a simplification of their export assortment, of a shift of the material content of international cooperations of CECTs-based enterprises with western partners towards the bottom of the respective production chain.

As yet it is impossible to prove this deterioration with the aid of a statistical analysis of international trade-flows, for this would have to be undertaken on the basis of an at least five-digit SITC classification - and such data are not available. But we shall try to verify its existence with the aid of anecdotal evidence of changes in the content of equity-and non-equity relations established between CECTs-based and EU-based enterprises, which we have collected in the course of our previous research.

2. Past and Present Motivations of West European Firms for Dislocating Part of Their Production „Eastwards“ and Their Entrepreneurial Concepts Applied in CECTS

Findings of numerous researchers published in professional literature indicate, that the effort to utilize low labor costs and overall low production costs was among the least important reasons why Western companies had taken up capital-or business engagements in Central European countries in transition. (Some economists gave to this effort fourth or even fifth rating³ among other motivations which had „brought these companies in“). The outcome of our own analysis confirmed, that there exists a wide range of various aims which these companies had pursued in past years - the achievement of a high market share in individual CECTs, possibly also on markets of other countries in transition having been often given high priority. But it has also given proof, that the majority of West European firms (by assessment about 65-75 % of those who are operating in these countries at present) would not have embarked on cooperations with enterprises in these countries, nor established equity relations with them, if they would not have had good grounds to believe, that they will be able to be buying, producing or operating here in another manner at extremely low costs. Moreover, the effort to utilize these cost-advantages, as well as the „revealed“ comparative advantages of these countries outlined above, had strongly influenced the scope and structure of business deals concluded here by foreign firms, as well as the material content of their industrial co-operations with „indigenous“ enterprises and last but not least also the manner in which their subsidiaries established in individual CECTs were operated.

³ see f.i. Mayer K.E. :“ Business Operations of British and German companies with the Economies in Transition: :First results of a questionnaire survey.“ Fourth Freiberg Symposium on Economics „Microeconomics of Transitions and Growth“, Freiberg, August 1995.

2.1 The Motivation of West European SMEs for Outsourcing to CECTs

Professional literature is mostly describing the fate (or prowess) of huge companies operating in countries in transition. Let us first look the other way - at motivations and behavioral pattern of small and medium-sized West European firms, which have become active in neighboring CECTs.

* The first impetus for medium-sized (and even some small) EU-based firms to reallocate part of their production to neighboring CECTs was the introduction of regulations (in the early 90s), restricting the number of foreign workers they were permitted to employ. To substitute these workers by local ones, whose wages would have been much higher, would have caused the bankruptcy of many SMEs, because with these increased wage costs they would no more have been able to „squeeze“ into the price levels for which their products could be sold. To have the simple operations which were previously performed by foreign workers performed in an enterprise just across the boarder, mostly only on a contractual basis, was often used as an effective way out of this dilemma. Most firms in boarder regions of CECTs (small, medium-sized and even big) were gladly taking one such assignments - in spite of the fact that their yields were usually marginal - for if they would not have caught on in this manner, many of them would have had to close down.

In later years (1992-1993), when competitive pressures were mounting up in individual EU-Member states, interest of their SMEs in establishing „prolonged workbenches“ in neighboring CECTs increased. They were no more interested merely in the above mentioned type of across-the-boarder operations. In their search for an appropriate location of their venture these firms were moving inland, for they had already become aware, that in regions where no alternative opportunities of employment exist, such workbenches could be operated as a veritable „work for wages“ assignment (without having to cover overhead costs nor depreciation), as here enterprises were willing to accept practically any conditions which would enable them to keep their staff on their payroll (being backed up by their workers who would accept strongly subnormal wages, in order to help the factory in whose vicinity they had built their houses - which they could neither sell nor leave - to survive).

When the privatization process in individual CECTs got under way, many SMEs from neighboring countries got involved in it. Some of them were buying tourist-and trade facilities - for these were assumed to be very profitable investments. Others were purchasing factories earmarked for privatization because - on the basis of previous experiences - they had decided to dislocate part of their production to such a country. But there were also such firms, which were acquiring assets mainly because they were unable to resist buying a huge relatively well equipped enterprise for the rock-bottom prices for which they were put up for sale in the framework of the privatization. Some of the latter learned only later, that even such a bargain can become a mixed blessing,⁴ for it is not easy to make an enterprise which was hibernating for years operable at short notice. Some had even overestimated their ability to manage such an enterprise from the distance (and this seemed often to be the only solution, for the yields from such a venture were often not high enough for covering the costs of a western manager's team staying in the country permanently).

⁴ see fi. the case study of the „Solhocz paper factory“ presented at this workshop by Dr.G.Papánek.

Thus not all these ventures had a happy ending. But -as the survey undertaken by members of our team had revealed, - in the majority of cases were the joint ventures and subsidiaries established by EU-based SMEs in neighboring CECTs successful (at least from these SMEs point of view). This is not astonishing, taking into account the very low costs of operating enterprises in CECTs, as well as the fact, that - besides by numerous Community actions undertaken in support of their launching ⁵- these ventures had been given strong legal and financial support also on the national level (an abundance of preferential conditions of financing, of credit and investment-risk-guarantees, of preferential tax-rates and custom-duties having been made available in most EU countries in order to stimulate investments of their SMEs in neighboring CECTs).⁶ But unfortunately these preferential conditions were made available mostly only for the initial investment, and not for subsequent ones, which were needed in order to modernize the newly acquired plant. Consequently raising bank-credits for the financing of these secondary investments was not only more expensive,⁷ but also more difficult and sometimes entirely unfeasible, as many of these audacious small investors had become somewhat top-heavy, their new acquisition being often manifold bigger than their own plant. Thus in most cases the joint ventures which these SMEs had established in neighboring CECTs had to „make do“ with their existing equipment (causing bitter disappointment of the local joint-venture partners, who had assumed, that a foreign capital participation would ensure the instantaneous modernization of their plant), the age of part of which was usually reaching back to pre-war times. And on such an equipment they were obviously incapable to reach top quality-standards in the knowledge-intensive production-lines of which their production-programs were constituted previously, which represented a precondition for their output being usable as inputs into the production of their foreign joint-venture partner, as well as for being saleable on western markets. Under these conditions the only way how to make such an enterprise competitive, how to ensure at least basic cash-flows, was to alter its production programme, to start producing here very simple products which could achieve top-quality standards even while being produced on obsolete machinery. Obviously, this was regarded by the local joint venture partner (and often even by the authorities of the host-country) as a most unwelcome adjustment. But it made the enterprise viable practically overnight and without additional costs, it turned the venture of the foreign investor into a profitable undertaking. And most important for all parties involved: it enabled the joint-venture enterprise to survive.

Nevertheless - these experiences caused a slow-down of the reallocation of part of the production of EU-based SMEs to CECTs to develop towards the mid 90s.

* A new upsurge of the interest of EU-based SMEs to develop equity as well as non-equity relations with their counterparts in CECTs - which was observed in the mid-90s - was caused by the introduction of „global sourcing systems“ by multinationals operating in the automotive, airplane-producing and other types of engineering and consumer-goods industries operated „on band“. The threat to be supplanted by subcontractors from NICs -

⁵ see: Sereghyová J. & coll. „Community actions in support of industrial cooperation“. Praha, mimeo, January 1997

⁶ getting acquainted with these preferential arrangements would help to explain why neighbouring EU-Member states were involved in FDI in individual CECTs much more than more distant ones. It would become obvious, that much more than the greater distance this was caused by differences in the scope of these supportive measures applied at the national level.

⁷ interest rates paid by SMEs are recorded to be several percentage-points higher than those paid by big companies (see: Sereghyová J.&col. „Community actions in support of international industrial co-operation“ discussion paper presented at this workshop). This makes also that part of their foreign investments, which does not qualify for the above mentioned special treatment, unduly expensive.

which this sourcing-system implies - had put EU-based firms acting as subcontractors to these multinationals under enormous competitive pressures, making them explore new means to reduce their costs. Among these outsourcing the simplest, most labor-intensive part of their production programme to a neighboring low-wage CECTs appeared to be one of the most effective ones.

At first they were rather apprehensive about the delivery-morale of the firms they meant to engage as their own subcontractors (or acquire in order to make them a permanent part of their own subdelivery base) as most of them were on the supply-end of JIT systems of their customers. But before long they learned to discern which enterprises in neighboring CECTs were totally reliable or could be made so presently and subsequently this outsourcing of part of their production began developing at a high pace. Thereby the competitiveness of many a EU-based SME subcontractor was strengthened, the continuation of their relations with their big contractors ensured. Even for the CECTs-based firms which had thus been linked into the production chain of these multinationals - though indirectly as subcontractors of their subcontractors - were thereby opened up new perspectives. But most of them are deploring the fact, that they have as yet been given the opportunity to act only as „third-tier subcontractors“, at the very bottom of this production-chain, as their „principals“ - the EU-based subcontractors linked in at the higher reaches of this chain - did not intend (and are not intending even now) to relinquish their position on this chain. They were developing their co-operation with subcontractors in CECTs merely as a cost-reducing device - as a cheap supply- line of the most simple inputs into their own production - and they intend to keep it so.

2.2 Attitudes of Multinationals Observed while Establishing Equity and Non-Equity Relations with Enterprises in CECTs

As mentioned above - to ensure a substantial market-share on markets of CEECs was certainly among the important motivations of multinationals, which caused them already since the early 90s to take up equity as well as non-equity relations with enterprises in these countries. But as the main priority of these companies can be regarded their effort to achieve on these markets a uncontestably dominant position.

It caused their interest to focus on the purchase of huge enterprises put up for sale in the privatization in these countries, which had occupied a monopoly position already since command-economy times. This motivation also explains, why not all their acquisitions in these countries were undertaken in order to operate the respective enterprise, but sometimes in order to subdue the irritating influence of an endogenous competitor⁸, or to achieve

⁸ see fi. the purchase of the only Hungarian steel-producing capacity by a foreign investor who presently closed it down.

supremacy in a potentially oligopolistic market⁹, or to prevent potential foreign competitors to „come in.“¹⁰

But in this study we are not concerned with clarifying why some of the multinationals failed to operate all their acquisitions undertaken in CEECs, but with observing the behavioral pattern they had adopted towards those which they had actually started to operate.

* In the early 90s, when these „strategic investors“ were bidding for the huge enterprises which were expected to ensure to their new owner supremacy on the respective domestic (and sometimes even on the regional) commodity-market, most of them not only promised, but some of them really intended to operate them as „stand-alone“ units. Meaning, that their newly established joint ventures or subsidiaries were to be permitted to continue „full production“ in their traditional (or in a technologically still more demanding) production line, to undertake their sourcing independently and to implement their own development concepts, while being aided by their „parent company“ financially in modernizing and extending their capacities, as well as in improving the innovative and quality level of their products.

Numerous case-studies confirmed, that presently after take-over, most „strategic investors“ started training the staff of their JV or subsidiaries established in individual CECTs, and often even the staff of their „endogenous“ subcontractors¹¹. Such an intensive training has been observed to be conducted long after the staff of such enterprises had become acquainted with the advanced technologies newly introduced in their firm, with requirements of total quality management and the use of HT equipment. Such intensive training is conducted even at present, though many joint-ventures are trying to reduce its frequency and scope.¹²

But other forms of „technology transfer“ have undergone certain changes in the past 2 - 4 years. At first this transfer had been effected by making technological know-how available to the CECTs-based JV or subsidiary either as a capital input made „in kind“ or on the basis of licensing agreements. But gradually it has been effected more and more in the guise of deliveries of HT-ingredients or components supplied by the „parent company“ or by other „members of its group“. This certainly contributed to the improvement of the quality of products produced by the JV or subsidiary, but it caused also their costs to increase, often

⁹ see fi. the purchase of the majority of Hungarian and Czech sugar-mills by a combine of two multinationals, which succeeded to transform this potentially competitive market into a purely oligopolistic one, with all the attributes and effects which this infers.

¹⁰ see fi. the „cluster“ of Polish home-chemicals producing enterprises which was bought up by a dominant multinational established in this branch, who started to operate only a few of them, while trying to sell the remaining ones to foreign firms which could use the equipment but are operating in another branch and thus would not become his competitors. As a case in point can be mentioned the recent acquisition of a Polish enterprise - previously owned by a Germany-based multinational - by the French firm L'Oreal.

¹¹ The scope of this training was different case by case. We encountered even such cases, where the entire staff of the joint venture - upto the charwoman and night-watchman - had been taught to speak passably English - this representing the bulk of the anticipated „technology transfer“.

¹² not only because they regard the scope of these actions as superfluous, but mainly because they imply the prologed presence of foreign experts in these countries, as well as numerous stages of their staff in more „experienced“ enterprises belonging to the respective „group“, the cost of which is regarded to be exhorbidant, syphoning of f an increasing share of their profits.

far in advance of the increase of the prices of their products which could be achieved thanks to such improvements.¹³

It caused also their R&D teams to become more-or-less redundant, for forthwith they were „fed“ R&D results by their parent company - increasingly in this „ready-made form“. ¹⁴ This is certainly in line with the tendency of multinationals to centralize their R&D in order to increase its efficiency and to ensure the mutual compatibility of products and semi-products produced by individual „members of the group“, but it is depriving these subsidiaries and JV of their technological potential (especially if they are reacting to this situation by disbanding their R&D teams) and thus also of the ability to operate as a „stand-alone“ unit.

In time, also „arms-length relations“ between the CECTs-based subsidiaries or JV and their parent company - which were expected to remain intact - were observed in many cases to be gradually dismantled, the production-programme of the former being more and more influenced by the latter, just as their sourcing of inputs. The management of several joint-venture which had been willing to grant us consultations professed, that they had been induced to narrow down their production-programme in connection with the „deepening“ of the division of labor among members of the group on which their parent companies are insisting at present.

Most of them did not mind the introduction of this development concept as such - though it represents a deviation from the above mentioned „stand-alone concept“ - but they resented the fact, that in this division of labor they were usually relegated technologically less demanding low-value-added production lines. They were thus obliged to link into the production-chain of the multinational at its lowest reaches in spite of the fact, that they deemed their enterprise to be fully capable to link into the higher reaches of this chain, thereby achieving a much higher profitability.

Seen from the point of view of the multinational, such a division of labor among enterprises linked into its production chain is perfectly rational,¹⁵ for if some of them have to

¹³ This is one of the main reasons, why the profits of most joint ventures operating in CECTs are very low and why most fully foreign-owned companies do not profess any profits at all or are making losses. By the parent-companies this was often explained by the fact, that they are „plowing back“ all their profits into these companies, that they are using them for investments and other improvements. But these investments have to be undertaken after taxation, whereas our findings are based on data about profits before taxation - so in this case this explanation does not „hold“. We have ascertained, that the continually low profits or continuous losses of fully or partly foreign owned firms are only partly due to transfer-pricing, that their main reason is the above mentioned specific „division of labour“ between them and their parent companies, in which they are relegated low-value-added or even loss-making production-lines, while being obliged to buy from their parent companies high-value-added semiproducts - often very sophisticated and expensive ones, which are not necessary for the simple products they are producing, whose costs their calculations thus cannot absorb.

¹⁴ In the course of our survey, which encompassed nearly a hundred subsidiaries and joint-ventures established by foreign „strategic investors“ we have encountered only three cases, in which these enterprises were able to continue full-scale R&D activities and only one case in which the parent company relegated part of its research to one of its subsidiaries established in a CECTs.

¹⁵ In the course of our survey we have encountered even such cases, where under the cover of a rationalisation project (cost-saving and quality-improving) to be implemented by all „members of the group“ their parent-company had succeeded to shift most of its internal problems over to them. In some cases this was done by inducing these subsidiaries to discontinue the production of high-value-added parts and ingredients, being obliged to purchase them forthwith from the parent company at prices often surmounting by far their own original production costs. They had to purchase these semiproducts from the parent company in spite of the fact, that they could have bought them from independent suppliers for much lower prices. Often they were induced to use subdeliveries of the parent-company whose parameters surmounted by far the technological requirements of their relatively simple production, thus causing the costs of the inputs and the prices achievable for their products to become incompatible. All this led up to a higher capacity-utilisation in the plant of the parent company, but at the price of increasing losses of their previously effectively operating subsidiaries. (We would like to stress, that such an attitude was adopted by these parent companies not only towards their subsidiaries in individual CECTs but also towards those in other low-wage countries).

produce labor-intensive low-value-added products or semi-products, it will obviously have to be those who are located in a low-wage-country. It would be absurd and often even impossible (for calculatory reasons) to relegate such a production to „members of the group“ situated in high-wage countries. It might be argued, that such a simple production could be outsourced to some developing country, but this is usually not done, first, because it would unduly increase transport and other transaction costs, second, because there is no point in such an outsourcing as long as an enterprise located in a nearby low-wage country figures among the members of the group. But this does not change the fact, that numerous subsidiaries or joint ventures which had been established by „strategic investors“ in individual CECTs in the early 90s had to „narrow down“ their production programme in the past few years not only in width, but also as far as its technological level is concerned.

This new „specialization profile“, - which had been adopted by many subsidiaries or JV established in CECTs by so-called strategic investors - caused the originally envisioned huge investments to become often less urgent or entirely unnecessary, for such technologically undemanding production-lines could usually be „run“ on their existing equipment. Thus new machinery was mostly installed only case-by-case, where it was conditional for reaching appropriate quality standards of the production or the improvement of work-conditions, while an all-encompassing modernization of their plants, the more so projects which had envisioned the automation and extension of their capacity, were in most cases postponed or fully abandoned.

This was caused neither by the inability of the respective JV - enterprise to achieve investment-credits from commercial banks, nor by the inability of their parent-companies to raise the needed capital on international capital markets, but mainly by the fact, that for those companies it does not make sense to undertake such labor-saving investments in countries with extremely low labor costs. It was caused also by their past experiences which indicate, that most of these enterprises could be made viable merely with the aid of organizational measures and that - as long as conditions enabling production to go on at extremely low costs will last in these countries - these enterprises can be operated efficiently even without such fundamental investments being undertaken. Nevertheless, this leaves the perspectives of these JV and subsidiaries very sensitive to changes which will set in the economy of these countries before long, (see § 3); it makes their perspectives rather „fragile“.

* Still more fragile are already at present various types of non-equity relations which had been established by multinationals in individual CECTs in the past 5 years. Their decision

We observed even one case, where the parent company took this concept even further, shifting off hundreds of redundant employees from its home plant to its subsidiaries, where they are acting as „doubles“ of each of the local employees for all functions once-removed from work on the shop-floor. (And even here the supervisors have such „doubles“). This happened in joint ventures where the qualification and technological discipline of the endogenous workers had been acknowledged by the parent company to be impeccable already several years ago, where such „double manning“ of the staff is entirely unnecessary. It is inflating their production costs beyond any tenable measure, as the staff which had been shifted over from the plant of the parent company is receiving ten times higher wages than local employees. Thus the costs of keeping f.i. 800 of such foreign employees on its staff, equals the costs which such a subsidiary would incur if it would be keeping on on 8.000 redundant endogenous workers. Obviously to insist on the continuation of such a regime will drive such subsidiaries into the ground in spite of the fact, that in all other respects they are (and in the recent past had proved to be) fully competitive. This regime is causing their losses to be mounting up - to the detriment not only of the respective enterprise, but also of the fiscal authorities of the host country - while touching the profit-levels achieved by the parent company only marginally, for these losses are deductible from its own taxable incomes. But it enables the parent-company to reach an „entente cordiale“ with the trade unions in its home plant, which forthwith are willing to accept compromises in other respects. Obviously, the implementation of such measures is taking the concept of „collective optimisation of revenues of the group“ too far. Fortunately such cases of abuse of this concept are very rare. Let us hope, that they will remain so.

to establish either an equity-or a non-equity relation with enterprises in these countries was obviously motivated by a wide range of factors - of which the most influential ones can be identified merely on the basis of anecdotal evidence about the choices, they had actually made. This evidence indicates, that in those branches and activities where intellectual property had to be protected or where a strong position in production had to be achieved and defended, as well as in most high-value-added production lines most of them had preferred to „buy in“, whereas in branches and activities capable of yielding only low profits , they have chosen non-equity-relations whenever possible.

Thus in the automotive and airplane-producing industry, in industrial electronics, in qualified chemistry, in telecommunications the major part of industrial co-operations between these multinationals and endogenous enterprises has been as yet based on their capital-participations in these firms. On the other hand in the production of shoes as well as in the textile and apparel-producing industry of individual CECTs foreign capital participations are relatively rare, while most of the presently existing ones were established in the course of the privatization, as at that time the extremely low prices for which it was possible to acquire the respective assets, had been enticing even huge foreign companies to „buy in“.

In most other cases even financially very strong companies had preferred developing co-operations with CECTs-based enterprises operating in these branches on a contractual basis. This can be attributed first to the fact, that profits achievable by enterprises in these branches are even in individual CECTs so low, that investing into them could hardly ensure an appropriate return on capital; second to the fact, that by getting involved in the marketing of products originating in these branches or by using them as inputs into their own production, these foreign companies have usually been able to achieve much higher profits than by getting involved in their production. Whatever the reasons, it was in these labor-intensive branches, where outward-processing-traffic between huge foreign companies and their subcontractors situated in individual CECTs had started (in Hungary already in the 80s, in the Czech republic , in Slovakia and in the Czech republic only in the 90s, recently developing here at a much higher speed).

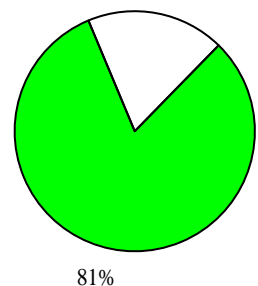
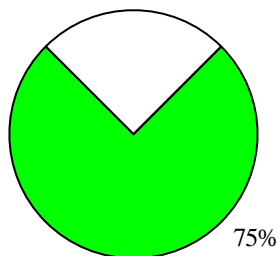
Table No. C

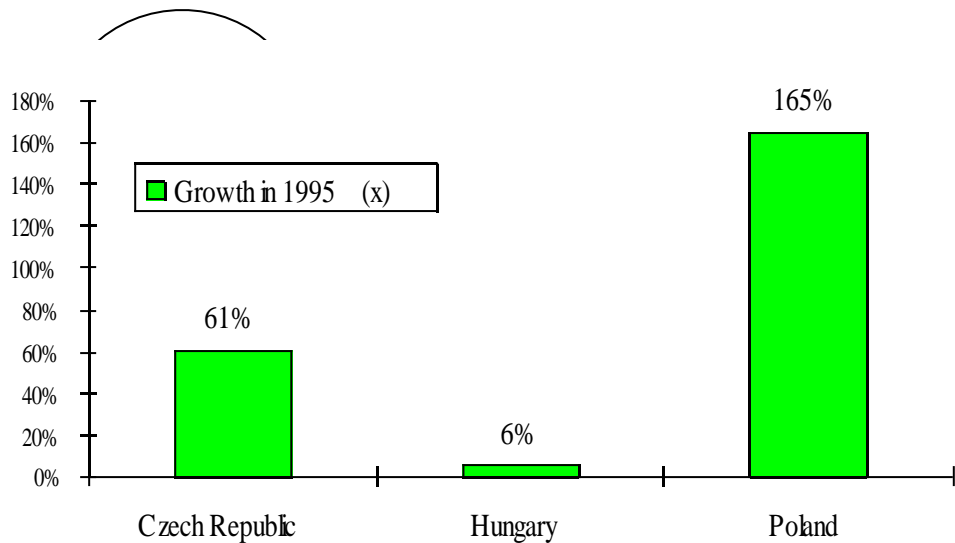
The share of OPT in exports of textiles and clothing effected by individual Central European countries in transition to the EU, and its recent growth. Share in 1994

Czech Republic

Hungary

Poland





Source : own computations on the basis of data given in „Economic Survey of Europe in 1995-1996“ UN. Geneva, 1996.

The pro's and con's of these OPT relations have been evaluated in professional literature, as well as by members of our team.¹⁶ At present we would like only to point out a few of its most important effects : first, it has given to big West European companies established in these branches the possibility to outsource the most labor-intensive part of their production, making them available for prices representing a fraction of their own production costs, which had improved their competitiveness not only on the Single market but also on foreign markets. Moreover, it enabled them to substitute their OPT-partners based in Southeast Asia with CECTs-based ones, which reduced their transaction costs and to a certain degree also the risks inherent to deliveries undertaken at such a great distance.

To numerous enterprises in CECTs operating in this branch - many of which were in the early 90s on the verge of bankruptcy - OPT-relations have given a new lease on life, simultaneously increasing their dependence on their foreign OPT partner (especially if they were co-operating only with one firm, which happened very often, if it was a very big one). From this can be concluded, that in principal the development of these relations was and still is beneficial for all parties involved. The problem can be seen only in the fact, that as yet the major part of these relations bring to the CECTs-based partner merely „sweat-shop

¹⁶ see :Pellegrin J: „Integrating Small and Medium-sized Enterprises of Transforming Countries into Western Corporate Structures : The Role of Outward Processing Traffic“. The Gdansk Institute for Market Economies, Gdansk, December 1996.

labor“, that with the increase of the share of these relations in his total output, he is shedding all attributes of full production - beginning from sourcing its inputs and designing its products, up to marketing them. Such OPT relations represent mostly a classical form of „work for wages“ where the foreign partner supplies everything, - from material and design up to his firms labels to be sewn on - and where he simultaneously purchases the bulk of the production for whatever price he deems right.

As our investigation had revealed, these prices are usually far removed from those, for which he is selling these products under his own trade-mark. Even so, OPT relations are often more profitable for the CECTS - based OPT-partner than if he would be selling his products on western markets on his own¹⁷, but in most cases he will be unable to survive, should his foreign contractor decide to terminate such a relationship (especially if he has only one or two partners and is focused mainly on OPT). And this might be happening with increasing frequency under conditions, described in § 3 of this study.

* With competitive pressures building up worldwide, in industrial branches which permit production-splitting, deep changes in the composition of the production chains operated by multinationals are under way. On the one hand the introduction of „ global sourcing“ has caused the widening of the territorial scope of the subdelivery-base of most multinationals operating in the automotive, aeroplane-producing and in other branches of the engineering industry, as well as in most branches of the electronics and electrotechnic industry.

This system is stimulating competition between their existing subcontractors and between those and potential new ones, causing all of them to implement a wide range of cost-reducing devices. On the other hand most huge companies established in these branches have been observed to be „honing down“ the number of their so-called „first-tier“ subcontractors, leaving it to the remaining ones to take charge of organizing production-splitting and co-operation on the lower levels of the production chain these transnationals are operating.

The first of the above mentioned tendencies has aroused the interest of multinationals operating in these and several other industrial branches in incorporating efficient enterprises from CECTs into their subdelivery-base. But as yet non of them had substituted their „traditional first-tier subcontractors“ with CECTs-based ones, though some of those are already capable to fulfill most of the strict requirements concerning quality standards and timely deliveries which they would have to fulfill in order to be able to play this role. This is caused first, by the fact, that most enterprises in CECTs have not yet achieved full credibility in this respect, second, by the unwillingness of most multinationals to get involved in „breaking in“ a new CECTS-based subcontractor, (however rewarding this might prove to be in the end).

Therefore most of the multinationals are trying to induce their old-established first-tier subcontractors to take charge of this „breaking in“ of these new subcontractors in their stead, while simultaneously carrying all the risks inherent to co-operating with such a partner.

As mentioned in the previous point of this §, EU-based SMEs had been seeking in individual CECTs subcontractors of their own already since the early 90s. and these had

¹⁷ for reasons explained in Sereghyov J.: „Impediments to linking SMEs in countries in transition into international trade-flows and subcontracting“. The Gdansk Institute for Market Economics, Gdansk, December 1996.

been seeking in turn suppliers of some of their inputs in other countries with still lower wage-levels. At that time they were motivated in this mainly by an effort to reduce their costs - and if this helped them to become subcontractors of a multinational, that was merely an accidental side effect. Whereas at present this process is initiated - and often even enforced - mainly by the multinationals, who are thus trying to „deepen“ their subdelivery-base and reduce the costs of operating it, while keeping arms-length relations to those enterprises, which are operating on its lower levels.

Taking into account the enormous trade-flows which are going on between multinationals and their first-tier subcontractors, even being linked into their subdelivery-base indirectly, as second-tier or even third-tier ones is certain a very desirable development for any CECTs-based enterprise, be it small, medium-sized or big. What is regarded as a problem is the fact, that as third-tier subcontractors they are usually performing labor-intensive and not knowledge-intensive operations, they are producing merely technologically simple low-value-added semi-products.

This need not be such a bad thing, as long as the respective enterprise continues to produce and export also knowledge-intensive final products, keeping on a full production cycle as well as all its preparatory and final phases . But should the enterprise relinquish all such alternative occupations, its linking into the subdelivery-base of a multinational as third-tier subcontractor might prove to be a rather short-lived solution whose viability might be diminishing in step with the changes anticipated in the economy of these countries (see § 3 of this study).

* Last but not least we would like to mention also „franchising“ - which has become in past years an increasingly important form of interenterprise relations which had been established by multinationals in individual CECTs. At first it was introduced mainly by companies producing engineering products in need of servicing, which succeeded - with the aid of franchising arrangements with endogenous firms - to establish within months a well functioning service-network in these countries, conditional for launching the penetration of their markets with their products. Subsequently also numerous renown producers of consumer-goods embarked on franchising, rapidly establishing their presence on the markets of these countries mostly without any capital outlays. (A capital-participation in establishing service-or sales premises operated by a local firms occurs only exceptionally. Rather, keeping up a full complement of inventories of the „franchised“ products is often co-financed by the foreign company).

Franchising is practiced in CECTs by numerous multinationals not only because of its low costs, but also because it eliminates most of the risks inherent to penetrating these new markets, where consumer-and user preferences are still differing somewhat from those established in developed market economies, where it is not easy to run a business because of the language barrier. By local firms which have been linked into these franchising networks the fact that they have been given the opportunity of selling or servicing products carrying an important trade-mark is of tremendous importance, just as the technical and advisory support, given them by the foreign company.

Of course, their absolute dependence on the foreign franchising partner translates into the conditions under which they operate (their profits being only marginal in spite of the fact, that the wages of their employees are still extremely low), but it gives to them an operational basis, which they would have to establish otherwise only with enormous

difficulties. But it cannot be denied, that franchising is enticing consumer-preferences in these countries away from domestically produced goods, contributing thus to their increasing substitution by imported ones, which can be observed in all these countries.

Nevertheless - as a survey conducted in the Gdynia region¹⁸ (of Poland) had revealed,- franchising can have also a positive influence on domestic production, as it is stimulating efforts of local firms to strengthen their competitiveness, beginning with the improvement of their marketing methods, up to triggering off imitative processes in their production. Though these processes have proved to be highly effective, they will have to be watched in coming years in order to ensure their conformity with EU-rules and regulations concerning the protection of trade-marks and design. This might be regarded as the only way in which this form of interenterprise relations which had been established between multinationals and endogenous firms in individual CECTs will be touched by future developments, whereas for most others forthcoming changes in the economy of these countries will most probably require substantial adjustments of their content and/or of their development concepts.

3. Circumstances Eroding the Sustainability of the Present Pattern of International Inter-Enterprise Relations in the Manufacturing Industry of CECTS

The outcome of our analysis lets us infer, that the majority of international interenterprise relations established in the manufacturing industry of individual CECTS led to the development of labor-intensive production-lines and that most of them are yielding relatively low profits in spite of the fact, that they are utilizing the extremely low wage-costs (and overall operational costs of locally conducted ventures) still persisting in all these countries. It is well known, that at present the average wage-level in these countries is in the range between 10% - 15% of that established in developed market economies,¹⁹ but that also the productivity of labor is much lower here. It is assessed to be in the range between 35 - 50% of that, which can be observed in the manufacturing industry of developed market economies.

Even so, the net cost-advantages which can be achieved by transferring a production to these low-wage countries are still considerable, but - as the following data prove - they are decreasing at a relatively high pace.

3.1 The Consequences of the Increase of Wage-Levels

It is mainly the high growth-rate of the wage-levels which can be observed in all these countries already since 1993 - 1994, which is gradually eroding this cost advantage. The pace with which this was happening in the past is depicted in the following chart, which

¹⁸ This survey had been conducted by the Polish-American Small Business Foundation, Gdynia in 1995. under the guidance of Dr. Przemysław Kulawczuk.

¹⁹ It should be noted, that in research and development these differences are still larger - by assessment reaching about 5 - 10% of those established in developed market economies. In spite of this, the transfer of R&D facilities to individual CECTs has as yet been observed only in exceptional cases, though these became a convincing proof that research can be conducted here not only at extremely low costs but also with good results.

shows that there exist considerable country-by-country differences in it. (These are caused not only by differences in the inflation-rate established in each country, but also by the fact, that in some of them the decrease of wage-levels was not so strong at the beginning of the 90s, and thus also their increase was less pronounced).

Table No. D The increase of the average wage-level in selected countries in transition (in USD)

	1990	1994	1992	1993	1994
Czech Republic	183	129	164	199	240
Hungary	213	240	282	295	317
Slovak Republic	179	128	161	174	196
Slovenia (x)	500	374	379	414	467

Source: WIIF, Dietz, Havlik.

In 1995 and 1996 wage levels increased further in most of these countries (only with the exception of Hungary, where they decreased by 12% and 3% respectively) though the differences in their pace increased. While in Slovenia they increased merely by 4% in 1995 and by 2,5% in 1996, in the Czech republic they increased by 17% in each of these years in real terms and in Poland even by 36% and 24% respectively. Thus the overall picture indicates, that wage-costs are still on the rise in this region.

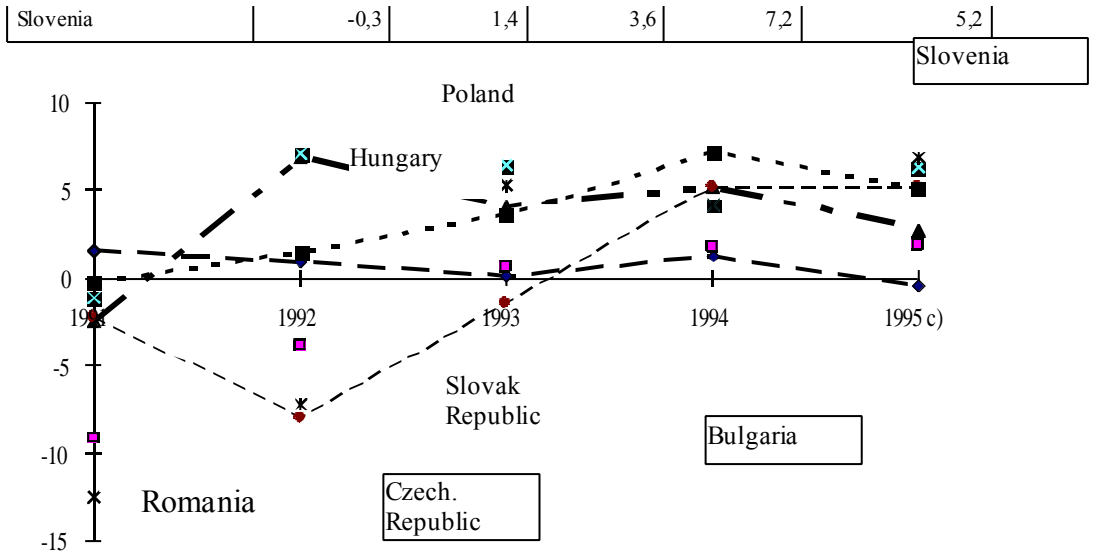
As past experiences indicate, there is no way how to stop this trend - not only because wage-regulation cannot be implemented towards private enterprises and even state-owned ones are capable to circumvent it - but also because domestic price-levels (especially the living and housing costs) are increasing at such a dramatic pace, that it is just not possible to keep wages down. The increase of these domestic price-levels is given not only by inflationary influences, but also by the increasing substitution of products produced by domestically owned enterprises by imported ones or by products produced locally by foreign-owned firms, the majority of the products of the latter two being much more expensive than those of the former. Most of them are traded on the domestic market for western prices in spite of the fact, that the incomes of the majority of the population are still in the range of 10 - 20% of that of the population of West European countries. Thus gradually the purchasing power of the population is diminishing - making its compensation by adequate wage-increases one of the most important political issues which cannot be disregarded.

3.2 The Slow Increase of Productivity of Labor and Its Main Reasons

It is generally argued, that wage-increases need not reduce the competitiveness of the enterprise sphere of the respective country, as long as the productivity of labor in its economy is increasing at a higher pace. But - as the following overview shows- in most CECTs this is not the case.

Table No. E The growth of labor productivity in selected countries in transition

	1991	1992	1993	1994	1995 c)
Bulgaria	1,5	0,9	0,1	1,2	-0,5
Czech Republic	-9,2	-3,9	0,7	1,8	1,9
Hungary	-2,5	6,9	4,4	5,2	2,9
Poland	-1,2	7,1	6,4	4,2	6,3
Romania	-12,5	-7,2	5,3	4,1	6,9
Slovak Republic	-2,3	-8,0	-1,5	5,2	5,2

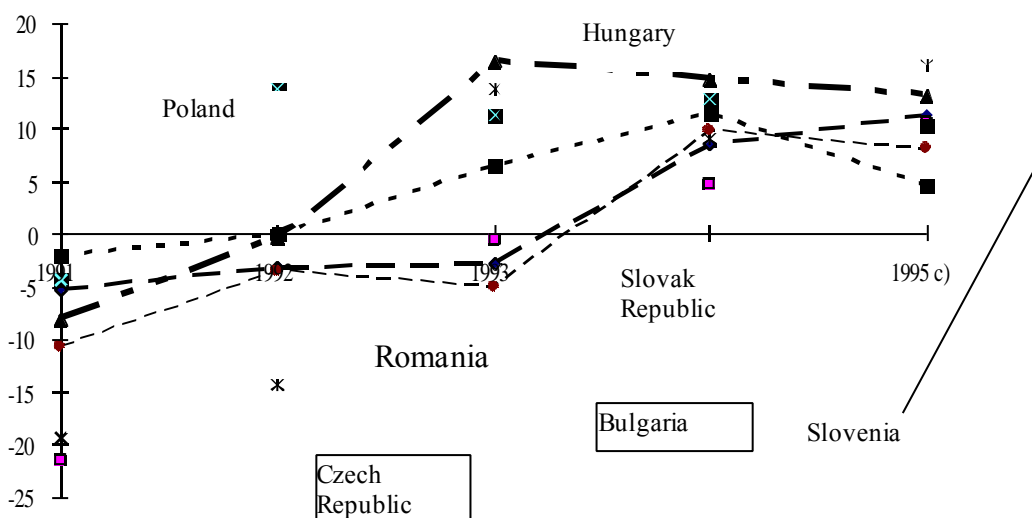


Source: constructed on the basis of data from „Economic Survey of Europe in 1995-1996“ UN. Geneva 1996.

To this slow uptake of labor productivity have certainly contributed structural changes going on in the economies of these countries, which caused a high share of their labor-force which was previously employed in industry to seek employment in the service-sector, where productivity of labor is much lower. That is also the main reason, why in their manufacturing industry this productivity was increasing at a higher pace then in the all-country average, but even here its growth was in the majority of the countries under observation still somewhat lower then increases of local wage-levels.

Table No. F The increase of the productivity of labor in the manufacturing industry of selected countries in transition

	1991	1992	1993	1994	1995 c)
Bulgaria	-5,2	-3,1	-2,8	8,6	11,3
Czech Republic	-21,4	-0,2	-0,5	4,7	10,5
Hungary	-8,1	-0,3	16,4	14,8	13,3
Poland	-4,2	13,7	11,3	12,9	10,4
Romania	-19,3	-14,2	13,7	9,1	16,0
Slovak Republic	-10,7	-3,6	-5,0	9,9	8,2
Slovenia	-2,1	-3,0	6,7	11,6	4,8



Source: constructed on the basis of data from „Economic Survey of Europe in 1995-1996“ UN. Geneva 1996.

There is a wide range of reasons why the new uptake of productivity of labor in the manufacturing industry of these countries is not more pronounced. In some of them it is caused mainly by the fact, that the privatization of their huge state-owned enterprises is not yet concluded, which makes their management keep on a large number of redundant workers. As our own investigation had revealed, in those enterprises, which had been privatized with a foreign capital participation a sudden surge of the growth of productivity of labor was observed soon after their take-over by the foreign investor, but this tendency usually „fizzled out“ after a few years. We have ascertained, that this was caused mainly by the fact, that in the first few years after take-over productivity of labor could be increased in these enterprises merely by dismissing redundant workers and thanks to improvements of the work-morale of their remaining staff and last but not least also with the aid of organizational improvements (in administration as well as on the shop-floor).

But after these possibilities were used up, a further increase of the productivity of labor was usually conditional on the introduction of more advanced technologies which implied the modernization of the existing or the installation of new equipment. And such investments were undertaken very rarely - in domestically owned enterprises mainly because in the early 90s most of them were unable to make long-term investment credits available to them, in partly or fully foreign owned enterprises for reasons explained in the previous § of this study. Since 1994 both these types of enterprises could have raised the capital needed for such investments easily, but the latter are still desisting from undertaking them because of the above mentioned reasons, while most fully domestically owned ones are doing the same, as taking on such huge loans at presently applied interest rates - which are somewhat lower than in the past, but still much too high with regard to the very modest profit-margins they are able to achieve at present, just does not seem to be feasible.

At first sight these conclusions of ours seem to be in crass contradiction with statistical evidence which indicates, that most of the CECTs have been experiencing a strong investment boom since 1995 .

Table No. G Investments in selected countries in transition between 1992-1995 (annual % changes)

	Gross capital fomation				Gross fixed capital formation				Investment outlays			
	1992	1993	1994	1995a)	1992	1993	1994	1995a)	1992	1993	1994	1995a)
Bulgaria	-11,0	-20,2	-10,1	-	-7,3	-17,5	1,1	-	-	-	-	-
Czech Republic	-17,6	-2,2	22,1	34,7	8,9	-7,7	17,3	14,8	-	-	-	-
Hungary	-21,7	35,5	16,3	-	-2,7	1,7	12,2	-	1,5	2,5	12,3	-
Poland	-13,0	14,9	9,0	-	2,3	2,9	9,2	19,0	0,4	2,3	8,2	19,0
Romania	-7,2	-	8,6	7,7	11,0	8,3	20,1	13,1	-	8,4	20,1	10,5
Slovakia	-32,5	-20,0	-19,8	17,4	-3,6	-16,0	-4,0	21,5	-	-	-	8,2
Slovenia	6,7	41,1	0,9	-	-14,9	15,0	18,3	16,0	-	-	-	14,3
Belarus	-	-	-	-	-	-	-	-	-29,0	-15,0	-11,0	-27,0
Ukraine	-	-	-	-	-	-	-	-	-37,0	-10,0	-23,0	-35,0
Uzbeki stan	-	-	-	-	-	-	-	-	-32,0	-5,0	-22,0	2,0
Estonia	-	-0,9	8,0	19,2	-	10,0	10,2	2,3	-	-	-	-
Latvia	-39,6	-76,7	53,2	10,1	-28,7	-15,8	0,8	3,2	-	-40,1	14,3	12,6

a) January-September for Czech Republic; January-June for Slovakia, Estonia and Latvia.

Source: National statistics and direct communications from national statistical offices to UN/ECE secretariat.

But as a recently concluded indebted-analysis had revealed²⁰ in the Czech republic only a fifth of these investments were undertaken in the manufacturing industry, half of them having been expended on covering the costs of building activities. A similar targeting of fixed investments had been observed also in other CECTs where a major share of them was „swallowed up“ by the energy producing and distributing sector, by transport and telecommunication, by banking and trade as well as by other branches of the service sector. Even in those countries where the manufacturing industry had a somewhat higher share in overall gross fixed investments (f.i. in Poland) it was still strongly underdimensioned with regard to the several years' delay of the modernization of the majority of enterprises operating in this industry and its long-lasting „undemourishment“ by investments. From this can be inferred, that in a relatively high share of enterprises situated in the manufacturing industry of these countries the seeds - the material preconditions²¹ - for the much needed substantial increase of productivity of labor have not yet been even sown, so it would be rather naive to expect that they would become fruitful before long.

* With regard to this situation the continuing increase of wage levels which can be observed in these countries is narrowing down those cost advantages, on which the majority of international interenterprise relations effected in their industry are based. Together with their disappearance the sustainability of labor-intensive simple productions - which represent the bulk of those operated here with the participation or under the auspices of

²⁰ see Prokop L. „Strukturální aspekty investičního procesu České republiky v letech 1993 - 1995“ IE ČNB, srpen 1996.

²¹ we are well aware, that this is conditional also on establishing appropriate systemic conditions for this process to develop. We intentionally are not dealing with this problem, as its scope is overlapping by far the subject-matter of our research.

foreign companies - will peter out. This will obviously not happen overnight, but if wage-levels will continue to increase at the present pace and a manifold increase of investments will not set in the manufacturing industry these countries at short notice (and this can be hardly expected taking into account their modest accumulation potential and the reticent attitude most big foreign companies have recently adopted towards undertaking new huge direct investment in their manufacturing industry) ²² at latest within 8- 10 years most of these operations will be in deep trouble, provided they will preserve their present pattern and material content.

While trying to evaluate the consequences of such a situation a full complement of alternative attitudes, which foreign companies might adopt under these conditions, will have to be considered. It might be assumed, that in those cases where they had established non-equity relations with endogenous firms, they will most probably discontinue them. The emergence of such a tendency can be discerned already at present in some branches of the consumer-goods industry of these countries (mainly in the production of textiles and apparel), where some of the biggest foreign OPT-partners can be observed to be moving part of their operations „further East“. Small firms might be somewhat slower in their reactions, for establishing contacts with far distant new partners might be difficult for them, but also they will have to begin looking in lower-wage countries for cheaper subcontractors before long, in an effort to preserve their own competitiveness.

It might be assumed, that foreign companies which had established equity-relations with industrial enterprises in individual CECTS, might be willing to tackle the situation in another manner. Some economists even expect, that especially big „strategic investors“ will take the restructuring of their subsidiaries located in these countries - which would ensure their viability under the above mentioned new conditions - firmly in hand, that they will become pioneers in locating, developing and utilizing a new set of comparative advantages of these countries. Hopefully, there might emerge some foreign investors with such characteristics. But as yet entirely different attitudes were observed in several cases: companies of world-wide repute committed to preserve full production and a stand-alone status of their joint venture established in one of the CECTs threatening to dislocate presently their operation undertaken here to developing countries, if their local joint-venture partner would not accept and the local authorities would not condone the application of a variable of the development concept described in the previous §, which not only represents a far deviation from their contractually stipulated commitments, but implies also the introduction of such a „division of labor“ with the parent company which is causing the subsidiary to be loss-making already at present and which certainly will be unsustainable under new conditions. From this can be concluded, that companies which have undertaken their investments in individual CECTs mainly in order to outsource some of the least profitable parts of their production-chain will not hesitate to wind up their operation here if it will no more be able to fulfill its intended function. Thus the exodus of numerous investors - big, medium-sized and small - which had taken up equity relations with endogenous enterprises in individual CECTs at the beginning of the 90s can be expected at the time, when the growth of labor-costs will make the preservation of the very simple production programs in their joint-ventures untenable.

²² there are exceptions in this respect - which we shall mention in the next chapter of this study.

Not even fully foreign owned enterprises might be always willing (or capable) to adapt to these new conditions. Already in the recent past we have encountered a few cases, where - rather than to undertake adjustments - foreign investors had decided to sell their acquisition made in one or the other of the CECTs „down the market“. In connection with this, so-called „brown-field investments“ can be observed to develop here at present, the new owner putting the enterprise (or rather the land on which it stands) to entirely different uses than those which it served previously, often taking it out of industrial use entirely. Though such a conversion might enable the original foreign investor to cut his losses, it has usually a negative impact on employment. This impact might be even more pronounced in such cases, where the foreign investor will not find a buyer for his subsidiary, if he will react to increased labor-costs just by shutting it down. It might be assumed, that those investors who will not yet have achieved full return on their investment, will have second thoughts about such a solution. But there will obviously not be many whose decisions will be restrained in this manner, as most foreign investors operating in CECTs (big, medium-sized and small) were trying to achieve full return on their investments soonest possible, regarding this to be a risk-reducing measure.

So while evaluating alternative scenarios of future developments in the manufacturing industry of individual CECTs it has to be taken into account, that even international equity relations established here might show a high measure of volatility, provided foreign investors will not regard new conditions developing in these countries as conducive for the fulfillment of the aims which had caused them to take up these relations in the past, provided they will see no point in adjusting their entrepreneurial concepts implemented here to these conditions.

Obviously, the only argument in favor of the implementation of new entrepreneurial concepts to be applied in individual CECTs - not only by foreign investors who had already established their presence in their economies, but also by possible newcomers, and last but not least also by all the foreign firms which already have been or mean to become engaged in non-equity relations with enterprises in these countries , is the possibility to achieve increased yields from their operations undertaken here forthwith. And such an increase is hardly possible with the use of the „revealed“ comparative advantages of these countries - which we have proved to be already vaning - but merely by utilizing their new „potential“ comparative advantages which we shall try to outline in the following text.

4. Developing „Potential“ Comparative Advantages of CECTS as a Basis for Incorporating Their Enterprise Sphere into European Corporate Structures

Efforts to define „potential“ comparative advantages of Central European countries in transition have been undertaken already in the past - mostly by their own economists. Unfortunately, the majority of these studies smack strongly of wishful thinking, of the assumption that special features of their economies and/or of their population which might have been regarded as their comparative advantage in pre-command-economy times, might be put to use even at present. Most of them do not take into account the technological gap which had opened up between these countries and developed market economies in subsequent decades, neither its implications for their possible rapid „catch-up“ in an environment which is changing at increasing speed. They also disregard the consequences of the loss of their international image, which even the best of their enterprises had incurred in past decades, as well as the formidable „ barriers of entry“ to market segments on which

knowledge-intensive products are traded, with which newcomers are faced at present. What they are disregarding most : however strongly equality is stressed in international political relations, in economic relations it are still differences in the development level of individual countries, which have a decisive influence on the position each of them is able to achieve in the world economy. And these differences are still huge between West-and East Europe and even Central European countries in transition are still far removed from the EU average. . As yet the pro-capita GDP - which is regarded to be the most accurate indicator of the economic level reached by individual countries- is still hardly 40% of the EU-average in the most developed CECTs, whereas in the less developed (South East European) countries in transition it is in the range between 12 - 20% of this average, even if counted on the basis of the internal purchasing-power-parity of the currencies of these countries. This will certainly influence also the manner and the level, on which the enterprise sphere of these countries will be able to link into European corporate structures.

Table No. H The purchasing-power-parity based GNP per capita in selected countries in transition in 1994 (in USD)

Country	PPP-Based GNP Per Capita (In U.S. dollars) ¹ 1994	Country	PPP-Based GNP Per Capita (In U.S. dollars) ¹ 1994
Croatia	4,412	Poland	6,364
Czech Republic	8,173	Slovak Republic	6,671
Estonia	7,991	Slovenia	6,342
Hungary	6,211	Romania	3,542
Latvia	5,781	Russia	4,294
Lithuania	3,551	Ukraine	3,149

1) IMF staff estimates.

Source : World Economic Outlook, IMF, Wash D.C. October 1996

From this can be concluded, that „potential comparative advantages“ of CECTs should be sought, developed and utilized not only with regard to their past achievements and traditions, but also and mainly with regard to their present R&D potential and the present capabilities of their labor-force, as well as with regard to other internal and external determinants of the position their enterprise sphere might achieve in the „ international division of labor“ which will develop in Europe in the course of future decades.

4.1 Potential Comparative Advantages of CECTs in the European Context

In order to avoid becoming prejudiced in favor of CECTs while trying to assess the „potential comparative advantages“ which they might apply in trans-European relations already in the near future, we consulted eminent West European specialists about their opinions on this subject-matter. ²³ Without any pretensions at giving a rating of their importance, let us first establish an overview of what could be regarded as a possible basis for developing these advantages.

Of mayor importance is certainly the educational level of the population of these countries, which appears to be near to that of developed market economies.

²³ We would like to thank especially Dr. A. Mulfinger from Dg XXIII of the EC for the valuable advice he gave to members of our team.

Table No. 1 Educational attainments of the population (aged 15 years and over) in countries in transition and in industrial countries between 1960 -and 1990 ¹⁾

				Education						Mean
				Primary		Secondary		Higher		School
Region	Year	Pop. 2)	None	Some	Full	Some	Full	Some	Full	Years 3)
Formerly centrally planned economies	1960	236	0,03	0,63	0,30	0,31	0,11	0,03	0,02	7,54
	1970	270	0,02	0,47	0,25	0,45	0,15	0,06	0,04	8,58
	1980	307	0,02	0,41	0,22	0,50	0,12	0,08	0,05	8,95
	1990	329	0,02	0,26	0,16	0,62	0,21	0,11	0,08	9,98
Developing countries	1960	685	0,64	0,29	0,10	0,06	0,02	0,01	0,00	2,05
	1970	866	0,56	0,33	0,12	0,09	0,03	0,02	0,01	2,66
	1980	1138	0,50	0,30	0,09	0,18	0,06	0,03	0,01	3,57
	1990	1492	0,40	0,35	0,12	0,21	0,07	0,05	0,02	4,43
South Asia	1960	355	0,74	0,22	0,07	0,03	0,01	0,00	0,00	1,51
	1970	440	0,69	0,24	0,09	0,06	0,01	0,01	0,00	2,03
	1980	566	0,67	0,14	0,05	0,18	0,05	0,02	0,01	2,97
	1990	732	0,55	0,21	0,08	0,20	0,06	0,03	0,02	3,85
Industrial countries	1960	458	0,05	0,57	0,33	0,31	0,12	0,07	0,03	7,05
	1970	524	0,05	0,50	0,32	0,35	0,12	0,10	0,04	7,58
	1980	598	0,05	0,36	0,18	0,44	0,23	0,16	0,07	8,76
	1990	662	0,05	0,33	0,16	0,41	0,15	0,22	0,10	9,02

1) Regional averages are weighted by each country's population aged 15 and over.

2) In millions of individuals aged 15 and over. The fractions shown for education refer to the population over 15 that has the indicated level of school as its highest achievement. „Some“ means that the indicated level is the highest attained. „Full“ means that completion of the indicated level is the highest attained. (the total of „None“ and the three categories labeled „Some“ is 1.0).

3) Average years of schooling at all levels. Source : World Economic Outlook, IMF, Wash D.C. October 1996

These data do not reveal the quality of education, which is known to have deteriorated in most CEECs in command-economy times. But neither do they reveal the astonishing universality which the labor-force of these countries had developed in the past because of having had to „ make do“ with quite inappropriate inputs and equipment. Nor do they reveal the existence of special branch-related know-how to be found among their population in some regions, which had been passed on here from generation to generation and had survived even command-economy times.

Since these countries had embarked on their transition to become market-economies two contradictory tendencies influencing not only the qualification-level, but also special expertises of their population, had developed : on the one hand thousands of persons had been given the opportunity to study abroad and millions have undergone professional training or re-qualification. In some fields a spectacular expansion of their expertise could already be observed and put to use, in others these efforts have obviously fallen on barren ground. But in principle a catch-up process is under way, not only improving the know-how of a relatively high share of the labor-force of these countries, but also eliminating cultural differences between them and the West European labor-force.

On the other hand the dismissal of redundant industrial workers had caused many of them

to seek employment in unqualified jobs, in which they are gradually losing their original expertise. State-subsidization of the majority of research facilities has been terminated and only a few of them survived on their own, because there was no demand for their services. In some cases this was caused by their inability to adapt to new conditions, but mostly it was the consequence of the bad financial situation of endogenous industrial enterprises which caused them to desist from ordering new research the more so, as they were not in need of its results because of the above mentioned deterioration of the structure of their output. And foreign owned enterprises were „fed“ R&D results by their parent companies. Thus even potentially potent teams of researchers were dispersed, most of their members looking for a livelihood in other professions. The same happened to R&D teams working in the enterprise sphere which - because of the reorientation of most industrial enterprises on research non-intensive production lines - had become redundant or so strongly underpaid that their members could be observed to be seeking other (better paid) non-technical jobs (in trade, in banking or in other branches of the service-sector). Even the young generation is shunning at present technical education, as the lack of new students applying for admission to the study of engineering and chemistry, indicates.

In this study we are not concerned with the ongoing loss of the technological potential, which this phenomenon implies, but about its implications for the formation an appropriate international specialization profile of these countries. Let us try first to visualize their „potential comparative advantages“ with regard to their present handicaps, abilities, capabilities and let us discuss „in plenum“ which of them might be developed, which of them might be successfully utilized and which of them have no chance to be applied successfully, however promising they might look at first sight.

- Whatever the deterioration of the technological potential of these countries might be, their population can still be regarded as capable of absorbing and applying high technology. But this capability is not evenly dispersed among and inside these countries. It is stronger in some regions, less strong in others. Industrial enterprises situated in the former regions might embark presently on highly knowledge-intensive production lines, while the staff of firms situated in the latter regions would have to undergo a preparatory phase before performing well. (It has to be taken into account, that to make workers in the latter regions to adopt top-level technological discipline is not only a matter of training. It is conditional on their willingness to adopt new attitudes to work performed, often even to adopt a new life-style). But in time the labor-force in most regions of these countries will be capable to achieve top-level western quality standards even in knowledge-intensive production-lines and activities. Already at present it is common knowledge, that the labor-force in all CECTs is showing an excellent trainability and that most of it is showing at least rudiments of a western production culture. Past experiences let infer, that especially in regions with long-term industrial traditions this culture can be improved further, also in this respect reaching western standards before long. We assume that these features of their labor-force could become one of the main „comparative advantages“ of these countries in coming decades.

- As another „potential comparative advantage“ of CECTs, which might be developed by many of their industrial enterprises can be seen innovative abilities of their staff, its ability to move „in step“ with the high innovative rhythm established at present in most industrial branches, in some cases capable even to undertake adjustments and improvements in advance of general innovative trends. (But we doubt very much, that domestically owned enterprises in these countries could become „technological leaders“ in individual industrial branches - as most of them will be even in future incapable to cover

the already presently enormous and further increasing costs of research this would imply). But already at this point we would like to stress, that the afore-mentioned two types of abilities and capabilities cannot be regarded as a comparative advantages „as such“, that they might be utilized as such a comparative advantage only in the context of two other ones.

- As the most important condition for applying these capabilities and abilities successfully can be regarded future developments of wage-levels in these countries. Other economists - better prepared for this task than we are - have already tried to estimate these developments and have come to the conclusion, that most probably in the course of the second decade of the next century wages in Central European countries in transition will reach present West European levels ²⁴, while at that time West European wage-levels will be again much higher. (Even taking into account the slow-down of wage increases which can be observed at present). This indicates, that for those West European firms willing to undertake green-field investments in individual CECTs (or to modernize fundamentally existing endogenous enterprises) - thus ensuring a nearly western productivity of labor in local plants - outsourcing knowledge-intensive parts of their production programs to these countries might represent an effective cost-reducing measure.

- As an argument in favor of outsourcing these production lines to individual CECTs - and not fi. to South East Asian countries or other NICs, where these productions will most probably be undertaken even in future at somewhat lower costs - might be regarded the vicinity of these countries. The fact that most enterprises in CECTs are „sitting“ at a distance of only a 6 - 20 hours' truck-drive removed from the main West European industrial centers - can be regarded as the key to making all their above mentioned comparative advantages „work“ especially in the European context. While estimating the advantage which this vicinity implies it is to be taken into account, that - in comparison- Japanese, as well as the still cheaper South Korean suppliers are at a 6 weeks' transport distance from big West European industrial companies seeking suppliers or subcontractors. Of course, some subdeliveries can be „flown in“, but certainly not all of them, for this would imply tremendous additional costs which would „eat up“ a major part of the calculatory advantages given by including these overseas firms into the subdelivery base of the West European company.

As yet South East Asian suppliers are more reliable than CECTs-based ones and business relations established with them are regarded by West European firms to be less frustrating than those with CECTs-based enterprises. But even if delivery-terms are kept by these South East Asian suppliers with absolute precision, there always can occur delays in transport (and this in fact happens frequently) and this could prove disastrous if deliveries represent inputs to be used in plants running on JIT.²⁵ To reduce the risks of such delays by establishing huge standby-storages of parts and ingredients of overseas provenance in west Europe would be enormously expensive , for hundreds of thousands of items would have to be stored here just in case they might be needed .

And in an increasing number of industrial branches, where subdeliveries are produced „on order“ establishing such standby-storages is entirely impossible. So finding a nearby relatively cheap supplier capable to fulfill all their technical requirements, will be

²⁴ This assumption was confirmed even by representatives of some of the „strategic investors“ operating in individual CECTs, which had undertaken these assessments in order to clarify the perspectives of their local subsidiaries.

²⁵ supply-system „just in time“ which does not keep inventories but assumes that inputs will arrive at the precise moment when they will be needed in the respective production-cycle.

regarded by West European companies established in some industrial branches outlined in the following text, as a veritable blessing.

- At first sight it might be assumed, that the above mentioned complement of „potential comparative advantages“ might enable CECTs-based firms to achieve before long a strong position on West European markets even as producers of final knowledge-intensive products, operating here on their own. Especially by theoreticians - even by western ones - it is assumed, that an improved product-quality and improved marketing methods is all what is needed in this respect. But anybody who has lived near to economic reality knows very well how naive such assumptions are. While contemplating the future utilization of these comparative advantages it has to be taken into account, that for newcomers to western markets - the more so for those who had spoiled their commercial image in the past so strongly as enterprises in Comecon countries did - to establish a favorable image which would enable them to penetrate market segments dominated by producers of products with world-wide renown, lasts decades. Besides, this would require huge promotion-campaigns to be undertaken all these years, which most enterprises in CECTs cannot afford. And being unable to penetrate such market segments, they would have to trade their products at the very bottom of the respective markets, under enormous competitive pressures of producers from still lower-wage countries, which would deprive them of most of the benefits of utilizing this new set of their „comparative advantages“. ²⁶ In comparison with these conditions, becoming subcontractors of a company which has a strong position in the upper reaches of these markets, might often (but not always) represent a much more favorable solution, not only in terms of achievable price-and profit levels, but also in terms of relatively stable sales possibilities and somewhat lower credit-risks. But whether such a subcontractor-contractor relationship would really yield such advantages is still dependent on a wide range of circumstances, among others also on conditions which will be created in and for the enterprise sphere of CECTS in order to enable it to develop and utilize the above mentioned „potential comparative advantages“ properly.

4.2 The Conditionality of Developing a New Set of Comparative Advantages by CECTs

Provided we shall accept for the time being as our „working hypothesis“ the assumption, that the above mentioned circumstances might represent „potential comparative advantages“ - obviously not of all CEECs, but at least of most Central European ones, - we should try now to outline the conditionality of their development and subsequent utilization. Taking into account the circumstances described in § 3, neither policy-makers in these countries nor their enterprises have another choice but to undertake pertinent actions in support of the formation of a new international specialization profile, for if they would opt instead for the implementation of a „wait and see“ strategy, this would cause them to land in an acute crisis situation before long. But at present we are still faced with the problem, how to make them comprehend the seriousness of this situation and the urgency to launch such actions.

²⁶ reasons for these disadvantages are explained in detail in „Impediments to linking SMEs in CECTs into European trade-flows and co-operation schemes.“

These actions will be different dependent on their targeting and on the level on which they will be applied, dependent on whether they will represent day-to-day adjustments or an effort at a reversal of counterproductive long-term trends. They will be different not only in different countries but also in different industrial branches.

They will differ case by case not only in individual regions, but also with regard to the actual situation in which the respective country and/or the enterprise applying them will presently be. It is obviously beyond our possibilities to visualize all these variables, which such actions might have in economic practice. But on the basis of our past research and thanks to advice we were given by eminent Community policy makers, we are able to outline here some of the principles, whose application should be underlying these actions.

* At the enterprise level - even before launching new long-term development concepts - it is of utmost urgency to stop a further deterioration of the material content of international interenterprise relations, a further worsening of the „division of labor“ between CECTs-based firms and their foreign contractors and/or joint-venture partners. In support of this, the following attitudes should be adopted :

- It might be assumed, that even in future - acting under extreme pressures and the imminent danger of bankruptcy - might cause industrial enterprises in CECTs to accept a „prolonged workbench assignment“. But forthwith this should be only an exceptional decision with a clear timetable indicating when its implementation is intended to terminate. In order to be able to terminate it, the enterprise will have to keep on part of its „normal“ production programme, even if it will have to be operated without profit.
- Often it might prove even in coming years to be necessary for CECTs-based firms to act as subcontractors of Western companies. But such a relationship should forthwith cover only part of their capacity (the smaller this part the better) and it should always be enacted in relation to several contractors .²⁷ Long-term experiences with subcontracting made in other parts of the world indicate, that the effort to keep the number of contractors, as well as the diversification of their production as low as possible - which can be observed in enterprises in CECTs - is largely misplaced. Rather, they should be apprehensive of a too strong dependence on one contractor, for this can be expected to be abused earlier or later.
- If subcontracting is not undertaken merely as a temporary measure, the enterprise should forthwith insist on being granted second tier (and if possible first-tier) status - even if the tasks it will have to perform in this function will require it to purchase new machinery or know-how, even if it would require it to undertake concerted actions with other firms operating in the same or in aligned branches (with the application of methods similar to those of the EEIG implemented in the EU).²⁸
- In order to be eligible as first-tier subcontractor (and often even as second-tier one) the respective enterprise has to have at its disposal an efficient R&D team. This team has

²⁷ The opinion expressed by the management of some firms engaged in OPT - which was revealed during field-research undertaken by Dr. Pellegrin in 1996 is in crass contradiction to experiences made in other parts of the world, where - having one or only two contractors - always led to a strong dependence of the subcontractor on his contractor, which earlier or later caused conditions under which he was conducting such a relationship to deteriorate. Moreover, such a dependence is putting the perspectives of such a subcontractor in jeopardy, for contractors are always prone to take a „move on“ if they will locate a more advantageous possibility to undertake their purchases elsewhere..

²⁸ See „Sereghyová J.: „Community actions in support of international industrial cooperation“. discussion paper presented at this workshop.

not to undertake basic research, but it must be capable of improving technologies and product-quality as a matter of course, possibly even to launch imitative actions which would improve the prospects of the respective firm. From this can be inferred, that the ongoing closures of R&D facilities have to be prevented even if this can often be done only at considerable costs.

- Enterprises have to become aware, that without their own R&D facility they will be doomed under new conditions, which will set in already before long, that in the meantime - before it will be again put to full use - it is worth while to keep such a team on. This does not mean that they should keep them on their pay-roll without having work for them, but they should hold on - „hand and teeth“ - to such production programs which are based on their own R&D. This need not concern their entire activity as part of it might „run“ on the basis of foreign R&D or might be R&D entirely non-intensive. But part of their production programme should make it possible to keep the technological potential of the firm alive, even if it would not be profit-making (or be causing it to incur even slight losses).
- But such losses obviously cannot be „carried“ indefinitely. Thus it is necessary to undertake all necessary steps in order to make a production-line based on their own R&D results profitable in the usual time-limit - i.e. within 2 - 3 years after it is launched. (This is the time needed for launching a new knowledge-intensive export line - even if it is given all possible financial, commercial and trade-political support. In CECTs where this support is extremely feeble a somewhat longer time-limit might be needed). If within this time-limit it does not succeed, the project - and very probably also the viability of the respective enterprise - will have to be reconsidered.
- If individual enterprises will be contemplating forthwith accepting a foreign capital participation, they should make sure from the very beginning, that they will be given permanently the opportunity to operate in the upper reaches of the production-chain operated by their new „parent company“. This they will have to ensure not only by making the foreign investor accept clear-cut contractual commitments to that effect, but also by making sure that it will be possible to enforce their fulfillment adequately.²⁹

While contemplating their future development concepts, enterprises in CECTs will have to reassess their technological and R&D potential in an all-European and global context. They should also start presently monitoring conditions developing on international markets of individual types of products they are producing - vis-a-vis this new evaluation of their present and potential abilities, capabilities and aspirations.

²⁹ The investigation conducted by Mr. Schmidt in the Treuhandanstalt had revealed, that investors which had taken up equity-relations in the „New Lands“ of the FRG had often not fulfilled their commitments and were not prosecuted by the Treuhand because of their breach of contract. This obviously was caused not only by the bad „contractual morale“ of the investors, but also by the unusually lenient attitude of the Treuhand. Investigations undertaken by members of our team in 1996 in Ireland had revealed, that here the government had insisted on foreign investors making quite clear-cut commitments, on binding their non-fulfillment to the payment of huge indemnities, and making their payment dependent on decisions made courts situated in the home-country of the foreign investors. These provisions had not only made it possible to enforce the commitments made by foreign investors, but they have also improved their contractual morale. It may be assumed, that also in CECTs this could be achieved - of course conditional on their authorities establishing similar conditions for foreign investors, as the Irish ones did. - see Sereghyová J. & col.: „Strengthening the grass-root economy with the aid of foreign direct investment: the Irish case“. mimeo, Gdansk, June 1996.

- First of all they should try to clarify which are the „run-away segments“ of the market on which they are operating (i.e. those segments, where customers and contractors will before long shift their allegiance further East or even to developing countries) and reallocate their own operations already at present to less endangered market segments, possibly to other industrial branches. They should become aware, that the lower reaches of the market on which are traded textiles and clothing, leather-and wood-products, construction work and base metals are clearly „run-away“ market segments, which they should leave soonest possible (even if they are still capable to break even).
- When choosing a new orientation, they should take into account that even on markets of these „sensitive products“ there exist market niches in which customers tend to be less „run-away“, where they might survive even after their labor-costs will have increased in the anticipated measure (see § 3). But these are mostly market niches in which R&D intensive variables of the respective products are traded, to which they might achieve access only if their R&D potential is strong enough and if they fulfill also other conditions of „entry“. Often it might prove easier to achieve access to such market segments as subcontractors of a renown foreign „innovator“. But in order to reap the benefits of such an alliance, the above mentioned principles would have to be observed.
- Enterprises should carefully test, in which branches their above mentioned comparative advantages can be put to better use and where this is not the case. So f.i. their vicinity to West European industrial centers is only of marginal importance in the textile industry and in microelectronics, for in these two branches it is perfectly feasible for most West European enterprises to transfer part of their production-chain to the other side of the globe or to undertake their sourcing in overseas countries, while in the automotive industry and in other branches of the engineering industry, as well as in qualified chemistry such a dislocation might cause them serious problems (and that not only in logistics). Thus for enterprises in CECTs to start a reorientation and/or a reallocation of their capacities to such branches might be a step in the right direction. But they should avoid overestimating their capabilities, or the position they might be able to occupy on the respective market . They will have to evaluate carefully whether and at what level they can hope to link into the respective production-chain, otherwise they might undertake huge investments which are doomed in advance.

There can already be observed a few pertinent reactions of big West European automotive firms to this need to build up part of their subdelivery-base nearby and to the gradual emergence of the „potential comparative advantages“ of individual CECTs described above. As such an example can be given the envisioned establishment of a huge plant producing diesel-engines in Hungary, i.e. of a high-value-added production, which might have survived even in the high-wage home country of the investor, that of the German firm AUDI. This firms has demonstrated its trust in the technological discipline of the Hungarian labor-force, not only by establishing this knowledge-intensive production on Hungarian territory, but also by having decided to withdraw nearly all its technical staff, - which will be aiding the launching of this production - after the conclusion of the first two years of its existence. Subsequently this huge capacity with 2000 - 3.000 employees will be handed over fully to the local management and technical staff, the parent company

retaining here only a small supervisory body comprising 3 - 4 persons.

- While evaluating their capabilities and comparative advantages, enterprises in CECTs will have to take account not only the present situation in the respective production, but also the scope and speed of innovative processes going on here. They should try to discern clearly in which of their present specializations they might be able to „keep in step“ with the innovative rhythm established in the respective branch and in which they are unable to do so. They should decide presently to leave the latter specialization and cut their losses caused by this as long as they are low, for otherwise they might loose out altogether - even while part of their production programme is viable.

As a classical example of the consequences of disregarding their shortcomings can be named the fate of numerous engineering-firms in the „New Lands“ of the FRG. Many of them were good in mechanical engineering but very retarded in electrical engineering and electronics. It may be assumed, that if they would have closed down presently the latter part of their production, simultaneously modernizing and adjusting the former one (i.e. their mechanical engineering), many of them might have survived. But instead, they tried to „keep these enterprises alive“ with their entire original production programme, thus spreading the consequences of their partial shortcomings. Consequently these enterprises went under „in toto“.

- While choosing a new export-line not only the assessment of the technological potential of the respective enterprise made by its own management will suffice. For a potential foreign investor or business partner - the more so for banks which will be expected to finance such a venture - it will be necessary to give proof of the abilities of the staff of the respective enterprise. Insofar not only the introduction of complex quality-management on its premises is most urgent, but also the certification of its implementation - and that on the basis of international norms - has to be undertaken presently. At first sight this seems to be an irrational procedure, for this certification will often concern production-programs which are going to be changed fundamentally before long. Nevertheless it is regarded as necessary especially for enterprises in CECTs whose technological credibility is as yet relatively low.
- While evaluating their capability to penetrate a market segment on which R&D intensive variables of its present production-line are traded, enterprises in CECTs must be aware, that this is conditional not only on the preservation and/or extension of their R&D facilities, but usually also on the substitution of their old machinery by new ones. The urgency of this differs in individual branches. While in most consumer-goods industries it will suffice to modernize mainly the final part of the production process, in other branches it will have to be modernized throughout. This will be indispensable in all those cases, where the features of the equipment predetermine either the quality of the product or the production costs. As an example of the former can be named changes in requirements observed in the engineering industry, where formerly inaccuracies (so-called tolerances) of up to 0,1 mm were regarded as acceptable, whereas today machinery showing higher inaccuracies than 0,001 mm is becoming unsaleable in developed market economies. And such new requirements cannot be fulfilled on old machinery. Old machinery tends to reduce the competitiveness of the respective enterprise already at the „first instance“ f.i. by increasing the norms of its energy and/or raw-material consumption. They often prevent also the implementation of new technologies, on which the competitiveness of the respective enterprise depends (f.i. the

introduction of „clean technologies“ or those which are less demanding on some expensive inputs).

- Most of these investments have a “quick return“ because they might become the basis either of a strong lowering of production costs, or of considerable price increases, or of increases of the volume of sales. But most of them are very expensive, thus bringing the question of financing these changes of production programs to the fore. For enterprises in CECTs it will be much more difficult to make the necessary investment capital available to them, not only because of the restrictiveness of monetary policy implemented in all these countries, but also because of the risks inherent to such a restructuralisation, with which in these countries are as yet only few experiences.
- Even more important is the availability of considerable credits for getting individual enterprises in CECTs launched in entirely new, not only knowledge-intensive but also R&D intensive - production lines. However apt at fulfilling all the technological requirements for „entry“ into such a production-line the respective enterprise might be, however high the yields of its reorientation on such production-lines might become in the end - their inability to finance these investments - either on their own or with outside support - can still prevent the implementation of a development concept representing one of the few alternative measures which could make the enterprise viable even under new conditions (outlined in § 3).

* So here we are at long last approaching the difficult task of outlining the „internal environment“ whose creation is conditional for the implementation of the urgently needed adaptation of the manufacturing industry of individual CECTs to conditions which will develop in their economy before long. We assume that there cannot be any doubts about the necessity to react to these new conditions by a pronounced shift of activities performed in this sector towards knowledge-intensive and research-intensive production-lines, towards the formation and utilization of their above mentioned „potential comparative advantages“.

First of all we would like to stress, that establishing an environment for these structural changes is especially difficult in countries in transition, where reducing inflationary pressures and achieving internal financial equilibrium belongs among the main macroeconomic priorities. Where budgetary expenditures had to be cut, the sphere of education and research was most prone to become the target of these cuts, for here their immediate consequences were better tenable than they would have been if they would have been implemented f.i. in transport or in ensuring the water-supply of the population of these countries.

Thus these austerity measures have taken their toll especially in these two „service sectors“ . The financing of research is representing today in all CECTs only a fraction of that usual in EU-Members states (evaluated on a per capita- count), while their teaching staff - mainly in lower and medium education - belongs to the worst paid employees in the country. Obviously, under these conditions capable teachers and scientists are leaving these professions, thereby causing not only a dramatic understaffing of the respective facilities, but also the reduction of the scope and a deterioration of the quality of teaching and research activities. This can hardly be regarded as a tenable background for the implementation of the development concepts outlined in this study.

Efforts to shift over part of the costs of basic research and education onto their recipients has as yet not brought good results. Rather than pay for such research results - which are far removed from every-day needs of most industrial enterprises in these countries - they desisted from using them, which added to the deterioration of the material content of their production described above. Rather than to apply for credits from which they might finance their subsistence during university studies (or even the fees university students will have to pay before long in some of the CECTs) most young people in these countries would forego higher education the more so, as they cannot foresee whether and when they might be able to repay such credits. Already at present the consequences of this can be sorely felt - especially in technical university education.

*It is not our task to describe all the policy-measures whose implementation is conditional for individual CECTs achieving an adequate international specialization profile. But let us briefly mention a few foreign examples, which might serve as a lead in this respect.

- It might be assumed, that the manner in which higher education was boosted in the South East Asian newly industrialized countries in the 70s and early 80s. - at a time when they were launching a similar restructuralisation as CECTs have before them at present,- might be used as an etalon for identifying the scope of the financing of university education needed forthwith in all CECTs. Data outlining the educational system which was introduced in these NICs. and the manner of its financing, are available. The spectacular penetration of the enterprise sphere of these countries onto markets of R&D intensive products, might be regarded as a proof of the successfulness of this system.
- Experiences with educating the young for medium-level technical professions made in Denmark and in other small West European countries should be studied and utilized. (Here a system had been developed according to which all industrial and crafts enterprises employing young people have to make obligatorily a stable contribution to the financing of this education, from which those enterprises which are actually willing to take care of the schooling of apprentices are adequately financed). Not only economists but also policy-makers in individual CECTs will have to take into account, that the perspectives of knowledge-intensive production lines do not depend merely on the qualification of top-level technicians, but also on the aptitude of the new generation working on the shop-floor, whose education had been sorely mishandled in most of these countries in the past 5 years.
- Primary education is the „salt of the earth“ from which the qualification of the new generation has to grow. Improving the staffing of this sphere as well as the quality of teaching, introducing advanced teaching methods and intensive language education, all this are investments into the future of the country which should achieve maximum priority while evaluating the distribution of budgetary expenditures.
- Provided the „undernourishment“ of the enterprise sphere of CECTs with results of basic research - which should be underlying innovative processes expected to be developing here - will continue, this might block entirely the restructuralisation of their manufacturing industry outlined above. In all the world basic research is directly or indirectly financed by the state, and this will have to be the case also in these countries. It has to be financed more amply than in other countries, for here it has not only to help enterprises to „keep in step“ with the high innovative rhythm which can be

observed in most R&D intensive production-lines, but it has also to be instrumental in closing the „technological gap“ which had developed between these countries and the West in command-economy times.

- The magnitude of resources needed for the financing of basic research in these countries, the organizational structures which will have to be established here in order to ensure its proper targeting and the dissemination of its results and last but not least also the costs of this dissemination can be assessed on the basis of the financing of these actions undertaken in the European Union - about which there are ample data available.³⁰ Already at this point we would like to stress, that these Community actions represent only part of research-results which are made available to enterprises in EU-Member-countries nearly or fully free of charge. Such supportive actions are simultaneously conducted also on the national level, thus strengthening the R&D background of these enterprises still further.
- To get acquainted with all these supportive measures is of major importance for members of the enterprise sphere of individual CECTs, first, because they will be able to benefit from them after the accession of these countries to the EU (and to some of them they might achieve access already at present - in conformity with the conditions of the European agreements), second, because these supportive measures are strongly influencing the technological potential of EU-based enterprises, into whose production-chains enterprises in CECTs are trying to link, with whom they might be competing before long (provided they will decide to get launched in more R&D intensive production lines). Not less important it is for policy-makers to become aware of the needs of financing basic research as well as of the fact, that its underfinancing might cause the respective country to vanish from international markets on which knowledge-intensive products are traded.
- Nobody can expect the enterprise sphere of individual CECTS to generate technological progress in HT production lines. But it has to be given the necessary background, which will enable it to join the „ first league“ in knowledge-intensive production lines and which will aid them to keep this position up. The utilization of this background will be up to each of their enterprises. But also in this respect they should be aided by public initiatives, which would foster their contacts with foreign partners and research facilities, which should help them to be well informed about technological developments in their chosen orientation. Again Community actions applied in this respect might serve as a lead as to actions which might be implemented for this purpose in individual CECTs.³¹
- About the crucial importance of an adequate financial background for the implementation of structural changes envisioned in the manufacturing industry of individual CECTs professional literature is testifying abundantly. Even members of our own team have treated this subject-matter in numerous studies elaborated in the framework of this project and the project in which they were involved previously.³² So here we can confine ourselves only to stressing a few points which can be regarded as important for the development of the „potential comparative advantages“ which are the subject-matter of this study.

³⁰ See among other also the enclosure to a paper presented at the Trento workshop under the title „Community actions in support of international industrial co-operation.

³¹ see reference in previous foot-note.

³² mainly studies elaborated by Doc.Dr. M. Čížkovský CSc and J. Sereghyová are dealing with this subject-matter, see references to this study.

- First of all we would like to stress, that investment-poor strategies are not conducive for the strengthening of these comparative advantages. (It should be kept in mind, that the lack of investment capital and the „economizing“ of investments, which had been implemented even after the lack of liquidity was overcome in these countries, belongs among the reasons of the deterioration of their production programs - which is in need of remedial actions at present).
- It may be assumed, that the reorientation of industrial enterprises in individual CECTs on knowledge-intensive and R&D intensive production lines will lead to an increase of their profit margins and thereby also of their ability to use bank credits for financing these investments. But it has to be taken into account, that the need of these investments will be huge - not only because penetrating into a more research-intensive production-line is expensive, but also because of the high age of the equipment on which the majority of industrial enterprises in CECTs are operating at present. So the equipment of the majority of them will have to be substituted by new advanced machinery entirely, for otherwise their chances of success would be blighted from the very beginning.
- It deserves ascertaining, whether -with the orientation on the development of knowledge-and research intensive production lines and the increase of their profits margins caused thereby - the number of enterprises which might qualify as recipients of concessional credits which might be granted by international financial institutions will not increase in individual CECTs. I might be worth while to ascertain what adjustments of these projects might facilitate their receiving such credits . Of course - the use of this source of financing restructuralisation projects will have to be evaluated case by case with regard to alternative financial sources which could be made available for this purpose.
- It is up to financial specialist to decide, if and how far special conditions for the granting of commercial credits to enterprises intending to launch such projects , could and should be established. Our own research has revealed, that in neighboring countries a vast variety of concessional credits, of preferential interest rates for investment credits serving the establishment of R&D intensive productions, of export-credit guarantees, of guarantees of investment credits etc. are available to their business community. It should be taken into account, that enterprises in partner countries which have recall on such a preferential financial treatment are potential competitors of those enterprises in CECTs, which will decide on operating a knowledge-intensive production line. So if the absence of these supportive measure will not prevent them to launch such a production in the first place, it might kill them off later on, because it might deprive them of an important component of their competitiveness.
- Although financing these investments with the aid of bank-credits seems to be much less convenient then ensuring them by accepting a foreign capital participation, for purposes of forming a new advanced specialization profile using bank-credits should be preferred. This does not mean that foreign direct investments are no more of major importance for an early conclusion of the envisioned restructuralisation of the economy of individual CECTs. But as our own research had revealed, as yet these investments had been only seldom conducive to giving to enterprises in these countries access to market segments on which highly R&D intensive products are traded. From this can be concluded, that at least in the near future, the first step in this direction local enterprises will most probably have to take on their own (with the aid of the banking sphere - not only of local, but possibly also of foreign commercial banks.)

- It may well be, that after the advantage of having just across the boarder a supplier of knowledge-intensive products showing western quality-standards will be recognized by important West European „strategic investors“, they might become more willing to invest into such productions. (The first signs of such a change of their attitudes have already been observed - see above). This would be a most welcome additional source of financing such investments. But enterprises in CECTs will have to make sure, whether such a capital participation will not prevent them to export their R&D intensive products to western markets (as is often the case at present), whether it would not unduly limit the scope of their exports and thus jeopardize the intended outcome of such an action.

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Obviously, there are numerous other measures, whose implementation will be necessary in order to improve conditions, in which enterprises in CECTs will have to try already in the near future to change their „specialization profile“. The above mentioned points were meant only to make policy-makers in individual CECTs fully aware, that - however strongly they are in favor of deregulation and an unimpeded functioning of the market mechanism - they will have to ensure the formation of a propitious background for the implementation of these changes, because under presently established conditions most enterprises in these countries would be unable to launch these changes and those who would try nonetheless, could hardly lead them to a successful conclusion. And this would certainly have not only serious economic but also most undesirable political consequences.

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New Organizational Structures in Russia's Defense Sector: Development of Entrepreneurial Ventures

Marianna Afanassieva

Introduction

The defense industry in the former Soviet Union enjoyed a privileged status. The best human and material resources were at its disposal. Cooper (1991) stresses that "as the principal beneficiary of the centralized system of non-market, administrative allocation of resources, the military sector became the strongest, most technologically capable part of Soviet industry" (p.5).

The defense industrial output averaged 20 percent of the GDP.¹ It would not, thus, be an exaggeration to say that the industrial base in the USSR was dominated by the defense sector. The Russian Federation has inherited most of the military-industrial complex of the Soviet Union. It is thus not surprising that the problems Russia faces in transforming that kind of legacy are enormous.²

The task of de-militarizing the economy is made even more difficult by the fact that Russia is undergoing a systemic transformation. The restructuring and conversion of the defense sector falls into the overall process of transition. The defense industry is faced with the double problem of, on the one hand, trying to convert to civilian uses with all the obstacles that the "defense culture" presents, and on the other, restructuring in a former planned economy environment.

The "defense culture" is a phenomenon that is characteristic of a defense industry in any country. A rather general account of its principal characteristics is presented here. The main customer for weapon's systems is the government, making it a one-buyer market. According to the US Congress OTA (1992) report the defense culture means that the

¹ Estimates differ and were not readily available in the Soviet times. Another indicator that can show the level of Soviet economy's militarization is the share of defence budget. The US Central Intelligence Agency's estimate was 15 to 17 per cent of GNP, cited in Gaddy (1996), p.10.

² A more detailed account of the role of the defence industry in Soviet and post-Soviet periods can be found in Cooper (1991, 1993).

targets set by defense companies are very different from those set by commercial companies (i.e., cost minimization, efficiency, volume production and price reduction). Military clients are concerned primarily with performance characteristics of weapons systems rather than the cost and efficiency of their production. Quality takes precedence over quantity and cost.

In the interests of national defense the weapons systems have to be of a superior quality, so the suppliers, i.e. defense contractors can push up the costs. Quality is of utmost importance, moreover, quality at any cost. The existence of cost-plus (and fixed cost) contracts emphasizes still more the low priority of cost minimization to the nature of the defense culture. The result is a performance-oriented and cost-intensive production process, which focuses on quality and sophistication of low-volume highly specialized output produced in the atmosphere of military secrecy.

Even in developed market economies the defense culture persists. There is a contrast as to how a defense company operates and how a commercial one does. Commercial, market conditions present in the civilian market are completely foreign to a defense company. In the civilian market, by contrast, high-volume production of commercial goods has to be combined with reliability and affordable cost.

The above is the paramount reason for the difficulty of conversion per se. In the Russian case, however, this is made even more difficult by the underdeveloped market environment. The legacy of the planned economy include: extremely limited factor mobility which exemplifies the rigidity of the system, a malfunctioning capital market, and a protracted establishment of a market for land.

The process of economic transition in post-socialist Russia is influencing the behavior and ultimately the organization of economic units. The predominance of large functionally organized enterprises and associations is constraining the shift towards market economy.

Diversification, as a result of reduced state military orders, is forcing the defense sector establishments to assume new more efficient structures and creates a possibility for SME development.

It is hypothesized in this paper that this movement is leading to the transformation of U-form structures (defense establishments were mostly organized along functional lines) to H-forms (holding companies) and M-forms (organized along product lines), though not in a pure sense. What matters is the necessity to develop in decentralized structures tighter financial controls which are characteristic of M-forms in order for the new structures to be efficient.

Decentralized organizational forms thus tend to adopt more M-form-like characteristics. The general direction, however, which is pointed to is that of moving from centralized to decentralized structures, but more precisely to the development of profit centers in the form of entrepreneurial ventures and possible spin-offs moving towards creation of SMEs.

Organizational Forms in the Soviet Union as a Legacy for Contemporary Structures in Russia.

In the USSR organizational and management studies were developing to suit the demands of the socialist organization of production. The centrally administered hierarchy of the socialist economy's management and control called for the creation of large enterprises and associations to fit better into these quite rigid vertical lines of control. The latter were represented by grouping the enterprises by branches of industry under the direct supervision of ministries.

In the late 1960's and throughout the 1970's there was an active process of creation of production associations (PO - *Proizvodstvennye Ob'edineniya*). The main tendency of increased concentration of production (where specialization was to be supplemented by internal co-operation) and centralization of management was supposed to increase the efficiency of socialist production. The economic rationale for the creation of associations was determined by comparing whether the joint activity of several industrial enterprises was more effective than their independent operation. The formation of production associations (PO) was said to be efficient when they would include similar enterprises of different branches of industry (Lekhzier, 1987, p.95).

However, the fact that the branch ministries were engaged in the formation of production associations played a crucial role. In reality the choice of enterprises, R&D establishments and design bureaus that were included in the associations was limited to those which were under the authority of a particular ministry. This exacerbated the vertical hierarchy of the economy's organization, constraining horizontal relations between economic units (*ibid.*, p.95).

The production associations in the Soviet Union had two general types of internal organization. Firstly, management was carried out through an independent management apparatus and, secondly, through the management apparatus of the head(principal) enterprise. An independent apparatus is created in cases when equally large enterprises are included in the association or it is difficult to single out a principal enterprise from the production units of the association, and when the production units of the association are located in different areas or when the association is a particularly large production complex.

In cases when the principal enterprise can be singled out from the members of the association, the principal enterprise's management hierarchy, as a rule, takes charge of management of the whole association. In those kind of associations small and medium plants are united around large principal enterprises, which engage in assembling the final product. The latter enterprises are a focal point for concentrating the main production, scientific and technical assets and personnel. They determine the production profile of the whole association, co-ordinate production and effective co-operation of the production units and extend the necessary support to them.

Usually, when the association of enterprises, plants, scientific and research establishments is based on a technological chain of manufacturing of a complex product (e.g., machine tool, instrument, automobile, chemical product, etc.) an assembly plant is the principal enterprise. This type of organization, which is called "assembly plant with affiliates", is widely spread in machine-building, instruments assembly and the chemical industry.

In production associations which use the organizational forms of the type "enterprise", "enlarged enterprise" or "combinat", management is carried out generally through the principal enterprise's management hierarchy (*ibid.*, p.102).

Another form of association widely spread in the Soviet economy was the scientific production association (NPO - Nauchno-Proizvodstvennoye Ob'edinenie). The production association differs from it in respect of the level and purpose of R&D involved. The production association develops new technology and equipment for its own purposes. The scientific production association develops new technology, the manufacturing or application of which is transferred, as a rule, to other enterprises. In the NPO the creation and development of new products is generally combined with a relatively small production base according to output and labor input. NPOs can include R&D establishments, design bureaus, as well as testing plants and small batch plants, all of which lose their economic independence. The small batch plants which are production plants have ties with sub-contracting production plants and enterprises (as Figure 1 illustrates). However, this is only the core activity part of the NPO.³

R&D, thus, plays a dominant role in the NPO, as opposed to a PO (production association). In the former case the production part plays a secondary role. And, moreover, it closely follows the requirements of the association's scientific and research potential (Nisevich, 1987, pp.179-180).

The role of the R&D is even more dominating in a research institute (NII - Nauchno-Issledovatel'skiy Institut). Principally these are research establishments for the promotion of basic as well as applied research. Not unlike in the case of NPO, NII also has test plants for the final product. However, more often a more important role is played by the test facilities to monitor and test processes and materials that are developed. It should be emphasized though that fundamental research is the principal sphere of NII's activity. We shall elaborate more on these establishment when discussing our case study.

Present Development of Organizational Structures in the Defense Industry of Russia and Comparison to the Western Organizational Forms.

In order to make our comparison we need to briefly highlight at this stage the development of western organizational forms.

The development of efficient economic units entails changing their internal structure. This on the one hand should reflect the outside environment and on the other, the vision of the top management as to how it is best to reveal the potential of their company.

Alfred Chandler described the evolution of structural organizational forms illustrated by the business history of the United States (Chandler, 1969) and Europe (Chandler, 1990; Chandler, 1993). He identified the transformation of a functional organizational form into a multidivisional one.

³ The larger the NPO, PO or a research institute (NII)(to be mentioned later) the greater its social sphere (non-industrial, peripheral) facilities for the employees, which can include housing, polyclinics, and hospitals, kindergartens, farms and food storage bases, cultural and recreational facilities (clubs and gyms), resorts and sanatoria, children's holiday camps.

The analysis was taken up by Oliver Williamson⁴, applying his Transaction Cost Economics approach.⁵

The U(unitary)-form structure came about initially as a large, single-product, multifunctional enterprise realizing economies of scale and the internal division of labor. Presently such a form is an appropriate and natural one for organizations of moderate size with multifunctional activities.⁶ This is a centralized, functionally departmentalized structure which is administered through functional departments such as production, sales, purchasing, development, and finance, each usually headed by a vice-president. Along with the president the latter formed the corporate headquarters.⁷

The advantages of specialization by function lie in the possibilities it affords for vertical integration and the reduction of transaction costs. Its disadvantage, on the other hand, is the extreme load on the chief executive as the firm expands.

The M(multidivisional)-form structure was a next stage of development separating strategic and operational decision-making. Chandler (1969) points out that: "In this type of organization, a general office plans, co-ordinates, and appraises the work of a number of operating divisions and allocates to them the necessary personnel, facilities, funds, and other resources. The executives in charge of these divisions, in turn, have under their command most of the functions necessary for handling one major line of products or set of services over a wide geographical area, and each of these executives is responsible for the financial results of his division and for its success in the market place" (p.2). This structure is a decentralized one.

Alfred Chandler (*ibid.*) characterizes the merits of the adoption of the multidivisional structure as opposed to the functional one: "... the older centralized, departmentalized form had failed to permit effective co-ordination and integration of the functional activities with market needs and demands and, at the same time, had prevented the senior executives from finding the time and information necessary to handle an increasing number of strategic decisions" (p.362).

Following Chandler's analysis Oliver Williamson (1975) summarizes the characteristics and advantages of the M-form:

1. The responsibility for operating decisions is assigned to (essentially self-contained) operating divisions or quasifirms.
2. The elite staff attached to the general office performs both advisory and auditing functions. Both have the effect of securing greater control over operating division behavior.
3. The general office is principally concerned with strategic decisions, involving planning,

⁴ O.Williamson actually "coined" the terms U-form and M-form in Williamson (1970).

⁵ In Transaction Cost Economics the main emphasis is placed on the notion of 'transaction', which means the transfer of products, information and services between technologically indivisible "places". According to the TCE approach that organization is more efficient, which economizes on transaction costs.

⁶ See Chandler (1969), Ch.1; Williamson (1975), p.133.

⁷ See Chandler (1993), p.312.

appraisal, and control, including the allocation of resources among the (competing) operating divisions.

4. The separation of the general office from operations provides general office executives with the psychological commitment to be concerned with the overall performance of the organization rather than become absorbed in the affairs of the functional parts.

5. The resulting structure displays both rationality and synergy: the whole is greater (more effective, more efficient) than the sum of the parts (p.137).

It should be stressed, however, that the reality doesn't always follow these models. Moreover, the superiority of the M-form in transaction cost economizing terms can be contested. As Alexis Jacquemin (1987) stresses: "Although the M-form evolved to counter bureaucratic inefficiency in large enterprises, this mode of organization has itself become the source of another problem. In order to supervise and direct the various operational divisions engaged in different activities, financial control, which is based on the common denominator of monetary return, has taken a dominant position in the organization, whereas the importance of managers specialized in marketing, technology, and human resources has declined. This evolution has resulted in an excessive weight being given to financial criteria; the result is abuse of mechanical methods of discounting (unfavorable to investments in human resources and in technology) and management of the activity portfolio, excessively minimizing risk taking and favoring rapid returns" (p.150).

What is important for our analysis, nevertheless, is that the operational divisions in an M-form enjoy a great degree of autonomy and take their own risks in such a way that each division constitutes a quasifirm, which is defined according to lines of products or geographical areas, and which is managed to achieve a specific objective (Jacquemin, 1987, p.143).

Another major advantage which is important for the case of the Russian enterprises is that the multidivisional form provides internal performance controls over the corporate organization's operating divisions. They have potential to counteract the lack of effective external control brought about by the dispersed shareholding of the joint-stock corporation.

The H-form, or holding company, is characterized as a loosely divisionalised structure, in which the controls between the headquarters unit and the separate operating units are often weak and unsystematic. This effectively means that the divisions, or operating companies, enjoy a high degree of autonomy under a weak executive structure. The general office or headquarters unit can be no more than an administrative office for the collection and aggregation of financial reports and earnings. It is said that this organizational form has the risk-pooling advantages of a mutual fund, but, nonetheless, it does not have the managerial discretion to permit the appropriate reinvestment of its earnings (Kumar, 1992, p.5).

The holding company form was less developed in the US, but was and still is common in the UK, as stressed by Weir (1995). Usually this form would be adopted by a firm acquiring new operating units as part of a corporate strategy towards diversification through acquisitions. The company itself and the newly acquired affiliates would be organized along holding company lines.

The characteristics of the different organizational forms are presented in Table 1. Charles Weir also adds several other forms in his classification, such as: transitional multidivisions (M'-form), corrupted multidivisional (M-form), mixed (X-form).

Coming back to the organizational structures in Russia, it should be noted at the very outset that the forms of production associations (PO), scientific research associations (NPO), and research institutes (NII) described above are generally still the predominant forms of defense establishments in Russia. NPO and NII are more common in the defense sector due to the fact that the defense sector has a substantial R&D capability to develop new military technology and equipment. An NPO, as well as some NII, would usually combine military and civilian activities as it was thought that the military industry was superior in producing high quality goods and was on the forefront of technical progress.

An NPO, as shown in Figure 5, is structured along functional lines. This makes it somewhat similar to the U-form structure.

The whole economy in the USSR was actually organized according to a hierarchical administrative principle. We should point out though that we cannot really consider a Soviet NPO (or a NII) to be truly a U-form even though it was organized along functional lines. An NPO and a NII, and any of the Soviet enterprises for that matter, did not have freedom in decision making. The directors of enterprises could not make any strategic decisions without the ministries' guidelines. As is well known, the meeting of production targets supplied by the ministries rather than profit was the principal goal. On the other hand, freedom of operational decision making was hampered by the necessity to get supplies allocated in a centralized manner (though the defense sector always had access to the best supplies).

The problem lies in the fact that the organizational forms we looked at in the previous section all were profit-oriented and developed in a market environment, even the functional form. The latter has no characteristics which would have been in contradiction to the operation in a market environment. Some enterprises could still operate maintaining the U-form, but they would have to be of an optimal size so that the extreme load on the chief executive as the company expands does not hamper the performance of the company. There could be still advantages reaped from specialization by function which brings possibilities of vertical integration (and economies of scale) and of the reduction of transaction costs.

An objection to the feasibility of the application of the organizational form paradigm to the analysis of the Russian defense industry thus can arise. Since we are not dealing with a market environment (the defense sector is operating mainly in a one-buyer - the government - environment), can we employ such an approach?

The reasons for the appropriateness of the comparison between the organizational forms developed in the west and the structure of Russian defense enterprises lie in the environment in which the latter now function. The defense sector in Russia post 1991 was put in such a situation when the usual conditions of defense sector operation were drastically changed. With the demolition of the administrative economic system rigorous administrative co-ordination is no longer present. However, the market in Russia is still underdeveloped. Defense enterprises have been forced to face the fact that the government

can no longer be the main buyer of their products, defense orders have collapsed, and the problem of 'marketisation' has arisen.

Since conversion as a state programme did not bring any tangible results due mainly to lack of funds for different conversion projects, defense enterprises started to find ways to survive chiefly by means of diversification (and this is what is meant by 'marketisation').

Below we shall look at different ways of Russian defense enterprises' and research organizations' adjustment when different forms of organization are assumed.⁸

The possibility for this presented itself chiefly by the process of privatization the discussion of which in greater detail is not feasible at this stage. Here we shall just mention that there were strategic enterprises which were prohibited from privatization. The rest have either privatized according to the privatization programme or were granted special permission by the Government. In many cases privatization meant, however, corporatisation, i.e. creation of joint-stock companies but with the state retaining control. However, those enterprises that had restrictions on privatization began to develop new organizational schemes for their transformation.

It should be pointed out that the legacy of the old system of operation when the defense enterprises had many different functional departments including R&D facilities and also social amenities hinders their successful functioning in new conditions. This dictated the necessity to give more freedom to the departments and divisions of enterprises, because the predominant logic was that "everybody should be surviving on their own". In the next part we shall outline the general trends of this adjustment process.

One direction of transformation goes along unbundling of large multifunctional enterprises.⁹ This process took mainly the form of the creation of a network of small firms (*malye predpriyatiya*) around the large enterprises. As a rule, the small firms were created a-new with the enterprises own assets and with private persons' resources, or using the enterprises' divisions as a base.

The problem that can be identified here was that in many cases most of the profitable activities of the enterprise were spun-off but the costs and overheads from maintaining the unprofitable parts of the enterprises and the social sphere would be written off to the enterprise as a whole. So the profits would actually be in those small companies and going to the people who were organizing them. In many cases this would be the top managers of the enterprise, because they would be able to shift around the enterprise's assets.

This development was also noted by Stark (1996), namely that "assets are distributed to the satellite companies around the main company and debts are centralized, increasing the enterprises' chances of inclusion in the government-funded debt consolidation" (p.1012). Although Stark made his conclusions based on Hungarian experience, it hold true for the case of Russia as well. In Russia writing off of liabilities to the enterprise as a whole effectively means centralization of debts so that the state would have to take care of it.

⁸ This section will follow to some extent, *Ekspertnyi Institut* (1996).

⁹ The other direction of transformation goes in the opposite direction of creation of new corporate structures that integrate inter-related production cycles.

Vinslav (1996, p.17) stressed other negative implications in the form of creation of favorable terms for these small enterprises, when they are established at loss-making enterprises with the losses of the small enterprises being transferred to the losses of the main enterprise. However, the positive effect of the small enterprise development concerns the fact that these entrepreneurial ventures make efficient use of the capacity, which is underutilized by the main enterprise. Apart from the mentioned possibilities of siphoning off the profits, the development of small enterprises in this case signifies an important type of restructuring whereby the principal aim is to maintain the core production and personnel through making the fixed capital available to be utilized by the small enterprises, simultaneously re-directing all the cash flow to the latter from the main enterprise (Vinslav, 1996, p.17).

There are several types of reorganization that were tried by defense establishments. These are: the leasing of an enterprise's divisions from the enterprise; the creation of daughter companies based on an enterprise's divisions; the transformation of the enterprise into a holding company.

Leasing of an enterprise's divisions from the enterprise means that enterprise divisions are organized into separate companies using outside funds (either of private persons or other organizations) which sign lease agreements with the enterprise as the owner of assets. Newly created companies can also lease assets from the enterprise. A problem with this variant of transformation is that the separate companies have enough independence to actually pursue their own economic interests and break the technological cycle if they had a part in it. So only those departments should ideally be transformed according to this variant which have a closed production cycle or supply some services and have limited relations with other divisions of the enterprise in terms of production.

The creation of daughter companies should also be based on those divisions that do not contribute to the core production. Independent firms are created in the form of daughter companies (either like joint-stock companies or limited liability companies) with the controlling package of shares retained by the enterprise. The advantage of this form is that operational decision making is left to the daughter companies but control is maintained through the controlling package of shares. The latter ensures that the enterprise as a whole still functions as one system. However, the mechanism of such control is not well developed, so the disadvantages are the same as in the case of lease agreements.

The transformation of the whole enterprise into a holding company presupposes the creation of several independent joint-stock companies based on the enterprise and the creation of a new company that would have the controlling packages of the shares of these joint-stock companies. This variant offers the advantage of separating defense and civilian divisions, so that the civilian ones could be more effective in attracting private investment because they would be independent legal entities.

As far as the operation of holding companies is concerned, there is no experience as to how they should operate in the specifics of the Russian economy. The mechanism of management of controlling packages of shares is not well developed. On the one hand, the financial controls on the operating companies are weak. On the other, the financial flows within the whole holding company structure are not regulated and could be inefficient. Another trait of Russian holding companies is the constant interference in operational decision making, "some sort of socialism" (*Ekspert* (1995), pp.30-31).

It is interesting to note that in a survey of successful industrial enterprises carried out by the a consulting company “Al’t” and the magazine “Ekspert” (published in *Ekspert* (1996), pp.31-41) the result was that none of the successful companies chose the holding company organizational structure. Moreover, financial controls and separation of strategic and operational decision making were put forward as the necessary conditions for success. In fact what we see here is the development of an M-form-type organizational structure.

Thus, the transition of the formally centrally administered economy towards a market economy entails a transformation of the functional structures into decentralized organizational forms. The latter are in many cases taking the forms described above. But it could be claimed that the more successful enterprises would be transforming along the lines of creating an M-form-type structure with tighter financial controls over the divisions (or daughter companies, or operating companies in a holding company), and separation of strategic and operational decision making.

This process is happening in some defense establishments, which are trying to diversify into new product lines having been faced with drastic reductions in military orders. The problem which then arises is how to organize these new activities. Most likely diversification would lead to decentralization of operational decision making and a shift towards H-forms or M-forms.

As was seen from the example of the development of M-form in Western economies, M-forms were created when companies diversified and it became difficult to co-ordinate and control this using the rigid functional structure.

Another advantage of the decentralized structure is the facilitation of horizontal links with other economic agents.

According to the Center for International Security and Arms Control of Stanford University, the relative values of organizing along functional lines as opposed to multidivisional organization will shift. However, the lack of development of new skills (e.g., marketing, cost accounting, etc.) would have to be provided in a centralized fashion. So effectively, the organizational forms would be mixed and, as mentioned before, with an emphasis on M-form characteristics (Bernstein, 1994, p.145).

Our next section is a case study providing an illustration of some of these trends.

Case Study: State Research Center of Virology and Biotechnology VECTOR.¹⁰

This and the following parts of the paper intend to give a description of trends developing in research institutes in post-socialist Russia with evidence taken from the “State Scientific Center Vector” and our analysis of these trends.¹¹

¹⁰ Case study material was prepared by Marie Laure Couderc of the Centre d'Economie Industrielle, Ecole des Mines de Paris, France.

¹¹ This case study was made possible thanks to the extensive co-operation of Mr Tatkov, Deputy Director of Science and Innovation at Vector.

The case study was chosen primarily for the relative success of its conversion. Its conversion was a decision taken by the government but the institute' staff reacted immediately and took initiatives of restructuring. It managed to preserve research potential in fundamental science mainly embodied into researchers, teams, past research experience, while enduring sharp organizational innovations:

- keep a core activity dealing with fundamental researches in co-operation with West European and North American scientific institutes.
- diversify its activities towards applied research in the field of pharmaceutical production.
- support the creation of SMEs producing market goods and founded by the staff of the institute

Vector during Socialism

Vector was founded in 1974 as a “Research Institute of Molecular Biology” and was meant to be involved in classified research with highly dangerous viruses. The creation of this institute was planned within the Biological Defense Program of the Soviet Union. This programme financed by the state budget provided the exclusive source of funding and of instructions for Vector.

Vector’s major goal was to study and assess viruses that could have a potential as biological warfare and to develop the respective vaccines and diagnostics basing on genetic engineering. It was similar to institutions like USAMRIID, Ft.Dietrick (USA) and CAMR, Porton Down (UK).

Conversion Period

Mikhail Gorbachev’ “perestroika” was also the end of the Cold War. The Government decided to suspend programs for biological war and its support to Vector. The Defense Ministry funding stopped. In 1991, a conversion proposal was made to turn Vector into an institution that develops and manufactures products exclusively for the needs of public health and other peaceful purposes.

A few crucial decisions were taken by the staff of the institute which illustrate that a real strategy had been elaborated in order to turn a former military Soviet institute into a market oriented institute.

1. to maintain the personnel who had an extensive experience in the area of genetic engineering and biotechnology;
2. to carry on fundamental research in the area of molecular virology;

3. to diversify its activities towards applied research aimed at developing new therapeutic, preventive and diagnostic agents for human and animal health, based on the most innovative achievements in genetic engineering and biotechnology;
4. to build production facilities in order to integrate its activities towards manufacturing and to produce a wide range of medicines for humans and animals;
5. to open itself and to develop, for the first time, international collaborations both in academic and in industrial circles, in fundamental and applied research and in medicine production.

This conversion strategy was convincing enough to raise financial support, conversion credits and capital investments from the State. Funds provided during 1992-1995 were used to buy:

1. A production line to manufacture recombinant interferon;
2. A facility for manufacturing diagnostic kits (in 1996 Vector covered 30 % of the Russian market);
3. An Italian production line to manufacture ready-to-use dosage forms.

Current situation

The current structure of Vector reflects its evolution towards a larger range of activities including applied research and engineering and production (Table 2: Structure of SRC VB "Vector"). Since 1994, Vector has been manufacturing goods targeted at the internal market such as drugs produced in co-operation with several foreign companies. These activities make a significant part in the overall volume of sales 1990-1996 (Figure 6: Income Pattern of SRC VB "Vector" in 1990 and 1996).

The year 1992 was a major rupture for Vector whose production and sales activities encountered a strong decline. Since then production and sales are growing again. According to data provided by the Russian Committee on Statistics, the production volume of Vector increased by 51 percent during the first 8 months of 1996 in comparison to the respective period of 1995 which makes an average growth of 7 percent per month (Figure 7: Production Output at SRC VB "Vector" within 1990 and 1996).

Since 1993, Vector is receiving funding from the Russian Ministry of Science and Technology Policy, and since 1996 from the State Committee on Science and Technologies and the Ministry of Public Health. This funding, however, is extremely insufficient to sustain Vector's activities. It makes about 40 per cent of total financial income. The 60 per cent left is raised through market funding (Figure 8: Dynamics of Funding and Applied Works at SRC VB "Vector" within 1990 and 1996).

To yield a profit from its activity, Vector has chosen to diversify towards production. This diversification however, requires serious capital investments. Different types of investors

are sought. During the year 1996 Vector's leading staff were being trained in innovation management. The investment project concerns a GMP-Production factory designed for the medical drugs for the Siberian and Far East regions markets.

Vector's leaders believe that its major asset is its highly qualified personnel who have been selected and trained for more than 20 years at the institute and who have an extensive experience of conducting molecular-biological and genetic engineering research, and highly precious practical experience of working on highly dangerous pathogens. As mentioned Vectors employs 2325 persons (end 1996) including 1252 directly involved in R&D work. The staff consists of 4 academicians, 17 Drs.Sci. and 166 PhDs.

The decline in staff seems to be stabilizing. However in 1990 the institute was employing more than 4000 persons. The following figures show that the decrease of personnel has touched more the administrative and support personnel than the research staff. This can be explained by the relatively high level of those categories in the Soviet structure (Figure 9: Dynamics of Decrease in Vector's Number of Employees within 1990-1996).

During the recent years, Vector is not secret anymore. This overnight switch is illustrated by the participation of its researchers in international conferences supported by different funds and grants (Figure 10: Participation of "Vector"-Employees in International Scientific Conferences, Symposia and Congresses).

One of its major problems is that until recently it was completely unknown in the international scientific academic as well as industrial environment. In 1996 Vector had already set up active collaborating with 12 leading research institutions around the world (USA, Great Britain, Germany, Canada, Italy, Japan, Austria, Sweden, South Korea) for joint work in the area of molecular biology, virology, and biotechnology. Since 1991 it has been involved in the International Program on smallpox genome sequencing under the auspices of WHO and since 1996 also in the programme for Orthopox Virus Diagnosis and Repository for Variola Virus Strains and DNA.

Its opening towards the international scientific community was supported by several important grants: since 1995, Vector has been running 4 projects funded by NASA and 2 by the International Science and Technology Center (which is supporting scientists to prevent their emigration in countries where their knowledge could be used against the interest of the western capitalist countries).

Its opening strategy consists in seeking collaboration of different types:

1. Joint research in new laboratories
2. Pre-clinical trials of new drugs using its own biotest animal breeding and holding facilities
3. Contractual research for foreign pharmaceutical companies.
4. Co-operative production of drugs.

Implications Drawn from Vector's Case Study

We offer to draw an analysis from this case study. First we shall look at the assets inherited from the past ; then we will analyze how these assets are used in order to face what we identify as main issues.

What are the most valuable assets inherited from the past? Part of the assets inherited are hardly valuable in the current environment. In this category we shall mention all the features aimed at securing a high level of secrecy and all the organizational consequences that it required, like the low quality of transportation facilities, remote location with poor transportation services and more important the absence of direct or indirect relation with civilian research and production sites. We have however identified three assets that we consider as being of major importance for conversion.

1. A high level community of scientists and scientific personnel. This asset seems to have been preserved as highly qualified personnel has remained in the institute.
2. Facilities, knowledge and teams of researchers involved in fundamental and engineering research (development of vaccines and diagnostics and probably also of bacteriological arms). Vector managed to keep five laboratories in fields as different and complementary as Molecular Biology, Bioengineering, Aerobiology, Cell culture and "Collection of micro-organisms culture". It also kept a research and design institute of biologically active substance. This implies that to tackle problems Vector is able to have recourse to an entire set of instruments and approaches.
3. An integrated structure, including production departments and "back up departments". We should note that because of the high level of secrecy the institute was meant to be autonomous. Not only in terms of scientific competencies, scientific support infrastructures such as animal breeding facilities but also in terms of general infrastructures (heating, water and electricity supply, etc.), and for what was called the "social sphere", i.e. housing, canteen, and leisure facilities.

We have selected these assets as being the most important according to the mode of conversion chosen. We shall see how these assets were used in order to face the challenges met by the institute after 1992.

We have identified its main challenges to be:

1. to keep its scientific staff: this asset can be considered maybe as the most valuable but also as one of the most fragile. If scientists are not paid they leave the institute for another job or country.
2. to protect its former and new discoveries and inventions: this element is crucial and needs to be tackled seriously. Indeed the former discoveries were rewarded by an Author's Certificate under the Soviet law. But this certificate should not be misunderstood as being a patent. It only recognizes the paternity of the invention. No exclusive right was entitled by it. Moreover in the Post-Socialist Russia, law is barely enforced, in particular to protect intellectual property. Even if the author's certificates are translated into patents and if new discoveries are protected by such a means, the guarantee of not being stolen and of raising a profit out of it is very uncertain.

3. to diversify towards marketable outputs: warfare projects find usually only one client: the state. When the government decides to stop a programme of “biological warfare” chances to find another client in the country are very slight. These research programs involve heavy investment, need a reinforced security. If the institute chose not to sell its discoveries to other governments it has to radically change activity and development new ones which can be financed through the market.

How did Vector tackle these three issues ?

1. As Deputy Director, Mr. Tatkov has put it: “The leaders believe that the major asset is its highly qualified personnel”. To protect this asset the institute made an organizational innovation which deserves to be described. The institute kept a core of researchers involved in contracts developed by the institute. And it encouraged and supported all the other scientists and scientific personnel to set up their own activities and eventually their own firms. The institute supported these initiatives by giving them free access to the equipment and other assets of the institute. This is how a set of around 20 companies flourish around Vector. As mentioned earlier, the transformation towards an M-form structure implies that the operating divisions “enjoy a greater degree of autonomy”. This is why Chandler speaks of “quasi firms”. At Vector each operating division is defined according to a line of products (for example face and body moisturizing creams) and behaves as a quasi-firm. Eventually, and mainly for strategic and fiscal reasons, these quasi-firms will establish as firms. But their link with the general office of Vector is so substantial that they can not survive separately from its headquarters. The products they develop and manufacture demand a shorter time of development and are consumer goods rather than pharmaceutical drugs. This restructuring is a key element of Vector's success.

2. During socialism, as we have seen, research institutes (unlike PO and NPO) did not integrate production facilities. Their main inherited asset is therefore embodied into knowledge. What is the best solution to protect 'knowledge' in countries where the legal enforcement is insufficient? Selling knowledge through licensing arrangements is highly dangerous and can jeopardize the entire institute. Indeed, knowledge embodied into chemical formulae, bacteriological, virology or biotechnology results (e.g., information about the genome) are very difficult to protect and very difficult to sell. The only available market alternative is to transform the scientific results into embodied knowledge, i.e., products. In Vectors' field of activity the products are medicines, vaccines, diagnostic tests, etc. To move in this direction, the research institute decided to integrate downstream towards production. This is why its first investment was dedicated to building a production line. Operating divisions, that is, new firms and quasi firms are responsible for their own line of products.

3. How was all this achieved? It came about thanks to a strategy set up by the leading team of the institute which took the risk of becoming involved in new innovative processes: restructuring into an M-form structure in order to adapt to the new economic conditions. The general office of Vector is now concerned with strategic decisions and long term research projects. It manages the allocation of resources among new firms and quasi-firms responsible for the development and commercialization of their own line of products. It should be stressed that due to its strategic and potentially very dangerous field of interest, this institute was helped financially by funds for conversion and by

international funds like ISTC - which was created especially to prevent 'brain drain' from this strategic institute. Moreover, due to its excellence it has been awarded a special status. It has not been privatized, it is still a State institute and participates in State programs for public research.

But on the other hand the economic and fiscal situation in Russia is very harsh. In these conditions even State institutes involved in Public research cannot survive only on public financing, namely from the Ministry of Science and Technology. Vector also has to turn towards market financing and for this reason it has to orient part of its activities towards marketable outputs. In any case, public funding cannot substitute for a comprehensive strategy of conversion and restructuring.

When seeking market funding Vector is facing an environment characterized by the absence of venture capital, a low level of banking and industrial investment into productive activities and low levels of foreign investment (particularly in Siberia as compared to Moscow and St Petersburg).

Apart from these general obstacles Vector also has to surmount difficulties of its own. The very bad image of bacteriological warfare activity which prevents institutional investors and donors to get involved (like the European Community). Its total absence of international scientific recognition in the past is due particularly to its former status of a "closed institute" which prevented its researchers from contributing to the scientific literature, from taking part in international conferences and, obviously, from involvement in international collaboration with Western countries. This institute has to build its image and its name on the international scene from scratch in order to attract potential investors and industrial partnerships.

Our analysis shows that the key issue which could solve these general and specific obstacles is not access to financing per se, but rather an innovative reorganization of the institute that secures access to financing. The success of Vector's conversion relies mainly on its ability to switch from its initial status of research institute for military purposes to a manufacturing pharmaceutical company.

Conclusion

Defense establishments in Russia are trying to survive in new conditions of reduced military spending and emerging market relations. In many cases survival strategies entail changing the internal structure in order to increase efficiency.

If one examines the first stage of evolution of the organizational form in developed countries from the functional organization to divisional organization, a certain parallel can be made with the structure and development of Russian large enterprises, NPOs (Science and Production Associations) and NII (Research Institutes). The functional form of organization (U-form), when the conglomerate is organized along functional lines, e.g.: manufacturing, engineering, accounting, marketing, etc., bears some similarity to large Soviet-type enterprises, NPOs and NIIs. This holds true also for those of the defense sector.

The trend towards re-organization of U-form organizations into H-forms (holding companies) and M-forms, where the multi-divisional organization is along product lines,

can be observed at some defense establishments in Russia through the development of entrepreneurial ventures in the form of small enterprises within the overall structure of the main enterprise with possibilities of future spin-offs.

However, the provision of certain functions centrally to the product line divisions will still be necessary. These are the functions which are called for by the new conditions of transition to a market economy, e.g. marketing, financial and cost accounting. The empirical evidence is provided by our case study of the State Science Center Vector.

One also has to mention that in conditions of a deepening financial and economic crisis in Russia the position of many defense enterprises would be even more uncertain if not catastrophic. Barter trade, which was not the focus of the paper, would have to play an even more important role in economic transactions and could be one way of isolating the enterprises from the turbulations in the financial sphere with all resulting consequences for the development of a market economy.

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The Challenge of Organizational Culture in SMEs' Growth Management (The Case of Bulgarian SMEs)

Kostadin Kolarov

Introduction

Small Business development in Eastern Europe is an essential factor for economic stabilization and economic growth. Undoubtedly SMEs are expected to contribute to the greatest degree to this process and to become a "spine" of the new East European economies.

At the same time SMEs' growth is taking place against the background of unprecedented societal and cultural changes, reflected in the specificity of firm's management.

Analyzing SMEs' growth scientists emphasize mostly on external for the firm and those internal factors that could be presented by the statistics.

Less attention (probably due to the controversiality of this research field) is paid to organizational culture and particularly to possibilities for successful contribution to firm's growth, afforded by the organizational culture.

This is reason the present work to be aimed to outline (in Eastern European context) the interaction between culture of the entrepreneur and organizational culture (OC) at the stage of growth and based on it to outline and analyze the potentialities of the OC as working tool in entrepreneur's hands.

SME's Growth

Despite of the fact that the term "firm's growth" is often used without further specifications, we consider necessary to clarify the criteria and dimensions of the growth with a view to selection and classification of research objects.

Some of research workers on the basis of strategic conception of growth divide the growth to internal and external, striving for covering all the aspects of its displays. This would be an appropriate approach as far as selection and implementation of growth strategies is

concerned, but it creates some difficulties when determination of precise and comparable measures of growth is necessary. These difficulties are caused by availability of purely qualitative criteria for determination of some types of growth. Size-based criteria are more applicable for the research needs. Two such criteria are used mainly: increase of sales (of profit as derivative) and of firm's size – measured by assets' value, number of employees, etc.

Owing to the fact that matter of interest here regards to the study of problems connected with people, the selection criteria for the firms will be increase of number of employees, assuming that this increase is a consequence of the increase of sales.

Another point to be considered is the difference in situations at beginning and at completion of growth. These differences refer both to the rate and to the stability of growth. Hence, the differences in managerial problems encountered by the entrepreneur have to be searched.

Critical Growth Factors

These factors can be divided into two major groups with regard to the firm: external and internal.

The external factors embrace the state of economy as a whole and of industry the particular company is operating in. The external factors will not be examined in detail due to the limitations of research objective.

Internal factors are assigned to two separately considered lines: the entrepreneur/manager and the enterprise as combination of main resources.

Despite of the exclusive importance of the latter the emphasis bellow will be put on entrepreneur-related factors: his goals, operative, managerial and strategic abilities.

Growth Management

In order to avoid interweaving (as far as possible) of the functions performed by the management during whole period of life cycle with those performed at the stage of growth, by "growth management" we will mean handling with problems emerging exclusively during realization of the growth. As such problems can be mentioned:

- connected with the change of managerial style – for instance, overcoming of the "one-man-band" syndrome;
- providing of resources for the growth;
- organizational-structural formation;
- balance of the roles "manager" – "entrepreneur".

By Hodgetts and Kuratko [7] the challenges addressed to the entrepreneur at the stage of growth are the following five key elements of management: control, responsibility, tolerance to failure, change and flexibility.

In strive for giving an answer to the challenges to successful growth management the present work emphasizes on the role of OC and on its correlation with above mentioned problems.

Organizational Culture

When using the term OC the conception is adopted that the foundation of every culture are certain beliefs and values from which through the medium of people follow the (visible) manifestations of OC.

Appropriate for the purposes of the present work is the following working definition generalizing the known concepts in this area: Culture is a complex set of shared values, assumptions and ideals, consolidating a given group of people, formed in the process of their socialization and distinguishable through specific manifestations in the organization's life.

The objective of the present work causes the particular attention that have to be paid to OC's determinants. According to the power/extent of their influence they can be divided into three groups:

1. External to the business environment – which combines the impacts of the elements of the environment as a whole and of industry in particular.
2. Cultural patterns bore by the entrepreneur, partners, managers and employees of the firm. Commonly these patterns are determined by the personal experience of individual obtained within the culture of the community (national, ethic, regional, religious, professional, etc.) he or she origins from.
3. The experience of organization's members accumulated during the process of working in it. In the case of SME often this experience is identified with experience of the entrepreneur, i.d. his culture, which will be examined bellow, is a determinant of exclusive significance for shaping of the OC.

Organizational Culture Influence

The influence of the OC on the effectiveness of an enterprise could be both positive and negative. The positive influence finds expression in facilitation and economisation of communications, decision-making and control, as well as in its capability for raising the level of co-operation and involvement of staff in the firm. Naturally, these features of the OC have to be used in accordance with the chosen strategy, otherwise the OC would be nothing more than an obstacle for the development of the firm.

To make clear the role of the culture for effectiveness of firm's management the study of its influence on the following essential processes for an organization: co-operation, control, communication, and commitment.

Co-operation between firm's employees can not always be formally regulated through premeditated rules and procedures. This is especially valid to SMEs where the necessity of mutual substitutions of employees performing different jobs as well as frequent occurrence of incidental situations in the work require a spirit of co-operation which is determined to a large extend by respective shared values.

OC influences the decision-making process as the shared values provide the staff with a set of basic assumption and preferences that reduce the probability of conflict consequences in this process.

Most telling example of OC influence can be found out in the control system adopted in a certain firm. Here two different mechanisms are distinguished: the formal one based on rules, procedures and general instructions and the second so called "clan" mechanism built up on shared values. Often in the inception stage of certain business the control is accomplished wholly by the entrepreneur but along with the firm's growth the necessity of establishment of more sophisticated control system is standing out.

The same complexity refers to the communication system where the culture's role finds expression in overcoming the barriers arising as a result of the increasing distances during the growth. This come about in two ways: first there is no need to communicate about things for which shared assumption exist; second shared values helps to interpret rightly the received messages and so contribute to an effective communication.

Finally for a person employed in a given firm is important to feel a sense of significance working there. Identification with the firm as well as general attitude to this firm is determined to a large extent by shared values. Thus OC plays an exceptional role regarding employees commitment to the firm and thence to the result expected from their work.

Organizational Culture Features in Growing SMEs

Here, we must take into consideration the following key moments characterizing OC in growing SMEs:

1. With the increase of staff number the influence power of entrepreneur's culture is in danger by imported cultural patterns;
2. In this stage the OC strength is increasing due to the number of shared values, extent of their sharing, and clarity of their ordering;
3. OC became more distinguished and visible through its manifestations.
4. To a successful growth management it is necessary to be found out the way by which the above changes can be directed and used by the entrepreneur.

Culture of the Entrepreneur

As a substantial factor for OC formation as well as basic determinant of entrepreneurial behavior, the entrepreneur's culture needs to be considered and studied separately in respect to its meaning and role.

The culture of an entrepreneur in essence is an individual culture and as such her origins are not more different than those of the others members of the society. The differences should be searched mainly in the content i.d. in its essence of beliefs and values. Of course in their study the existing typologies concerning the entrepreneur should be taken in mind in order to separate the universal from specific features of his culture.

Concerning the influence of the entrepreneur's culture on OC in SME, it is reasonably to suppose that it is as stronger as the efforts of the entrepreneur to impose his beliefs and

values among the employees is stronger. Here, however, we have not to forget the contradiction between entrepreneur's interests and these of his employees. Moreover the influence of his behavior, frame of mind and reactions is rather unconscious than intentional. But while the entrepreneur is the only person who have the curb of his small firm well in hand he can lay the beginnings of OC identical with his personal preferences.

Entrepreneur faces a more complex situation during the stage of growth. On one hand his indisputable position enables him to direct the coming changes, including these in OC. On the other hand the standing out of new key figures in the firm could remove the focus of forming OC. The arising problem is how entrepreneur could work on OC so as to ensure the growth without appearance of internal contradictions resulting from the perceived up-to-the growth cultural pattern? A strong limitation in the solution of this problem could be the very entrepreneur's culture. Nevertheless, the role of entrepreneur as an engine of the firm's growth gives us grounds to perceive him as subject in regard to OC.

A Hypothesis: OC as an Instrument in Growth Management

An important challenge here is to design a model able to explain the interaction between the entrepreneur's values and the OC profile. As a starting point the following hypothesis can be used:

H1: The shared values, which are in the core of an OC, are to be very similar to these of the entrepreneur regarding his/her leadership role in SME.

Another research issue is to relate the culture to SMEs growth. While the growth can be easily measured the culture's influence is a subject much more appropriate for qualitative evaluation. Through the understanding of this influence as well as the role of the entrepreneur the another questions can be answered: Can culture be an instrument for growth management? Here a research has to prove the hypothesis:

H2: The implementation of growth strategy and particularly strategy formulation process reflect the entrepreneur's basic values and the culture of his/her enterprise.

The problems here are connected with the lack of widely accepted conceptions about values-culture-growth relations as well as the insufficiency of relevant earlier researches. A practical approach against such limitations can be the implementation of qualitative methodology due to exploratory stage of the proposed research.

A third hypothesis, which can be verified in the research but in a more advanced stage, is:

H3: OC can be an instrument for growth management in SMEs.

OC predetermines the employees' behavior as regards given change in a firm. In our case such change is the transition from one stage of the life cycle to another. Undoubtedly the firm's growth would be fulfilled with fewer failures if the employees share values consistent with the chosen strategy. I.e. OC has to stimulate behavior that is functional with respect to the growth.

Assuming that the entrepreneur can effect the formation of culture in his firm on one hand and that the core of each culture are values which sharing and diffusion can (even not so easy) be influenced, we can formulate the hypothesis for OC as an instrument in growth

management. Below on the basis of the key challenges of growth the directions in which this hypothesis will be investigated are presented.

Directions and Activities in Use of OC as Instrument:

Selection, hiring and training of the staff. These three activities provide an excellent opportunity for process of change of values and norms according to the growth strategy. On one hand this opportunity comes with the increase of firm's staff as the adopted set of values can be include in the criteria for firm's newcomers. On the other hand the training necessary for the stage of growth can be used for formation of relevant firm's culture.

Staff promotion and authority delegation. Firm's growth needs more persons in charge of management. Exactly the way the entrepreneur meets these requirements determines the success of growth. Here the contradiction arises between the culture of entrepreneur and cultural patterns of a more consolidated management. The ability for overcoming of such contradiction emerges through the way of promotion of employees and range of delegated authorities. Thus, the OC influences strongly both lines.

Correlation between the performance and motivation (rewards) system. An effective instrument for adoption of growth oriented values is the interrelation between rewards and results (performance). Thus the employees of the company will strive for performing their duties in accordance with adopted values. Consequently such values have to be shared, which would contribute to the increase of effectiveness of the behavior, hence and success of growth.

The frame shaped in this way canalizes the lines in which the role of the OC has to be studied.

The Case of Bulgarian SMEs

Some Reflections on OC in SME's Growth

When we try to investigate the role of OC in growth management it should not be ignored the specificity determined by the place and time, in which the problem is considered. Of course the research interest should not be narrowed to the Bulgarian case only and we will quest for common features of Eastern European societies, whose similarity is caused by almost the same social-economic systems, existing before 1989, as well as by current process of transition towards market economy. To achieve more explicit picture it is necessary to identify the change of attitude towards the small business development and the growth of new private enterprises in particular.

The relatively short (compared with Western developed countries) period in which the small business sector develops as well as the lack of enough relevant studies penetrating into the OC problems of SMEs set serious problems in explanation of the Bulgarian specificity. In this direction of some interest is the work of K. Todorov studying the need of change and adaptations of the organizational cultures in Bulgarian industrial firms. [18] He points out the following determining the specificity factors affecting the firm level:

- The transition from central planned to market economy leads to radical change in the peoples' value systems and way of thinking. (Here must be mentioned the work ethic, new moral norms of society, attitudes towards business.)
- The stable in the past environment of industrial firms and thence and imposition of hard administrative approach in management depressing the people's creativity predetermining the basic firm value as "keeping up the status quo". (This factor has projection in the relations in the new SMEs as far as the entrepreneurs and the work force come from the large state-owned enterprises.)
- The dominating conservative attitude of Bulgarian people to changes as a whole.

Despite the similarity in the state of EEC economies and the relatively equal social political conditions during the last decades and the period of radical political and economic changes after 1989 there are some differences with respect to the specificity which roots are in the more distant past and in the national features.

One of the firm culture determinants is the economic culture of the society as a whole as well as the one of each man. The interrupted traditions in entrepreneurship and egalitarian way of thinking, the negative attitude towards higher staying and negative perceiving of the big profits are still not overcome as a significant part of the Bulgarian's economic culture.

The suspicion and mistrust toward the entrepreneurs from a big percent of the working people are another feature to take into account.

The unemployment become a demoralizing factor as a result of which a blow was struck on the traditional values – education, professionalism and belief that success can to be achieved through hard work.

These specific features of the economic culture reflect directly or indirectly in the new SMEs' cultures. Hopeful thing is the presence of such SMEs that despite all manage to consolidate the efforts of their personnel and successfully implement their strategy of growth. The presence of entrepreneurs capable to get the upper hand on the market and to accept contemporary methods of management is proved from the significant number of firms had been grown up during the last few years despite the unfavorable environmental conditions.

Empirical Evidence about OC in the Growing SMEs

A study aimed to identify the growing SMEs conducted by the Entrepreneurship Development Center at the University of National and World Economy helps us to reveal some aspects of OC in these enterprises.

The OC in the growing enterprises (7% between 320 SMEs) was studied to a degree providing us with information about its role in SMEs growth. Due to this reason as well as to the limitation of the research method used – a questionnaire, the analysis was based on some key indicators featuring the existing OCs and some determining them factors.

The qualification level of the employed people was questioned as a starting factor. On one hand a group of SMEs can be outlined in which the qualification of the most employee is

estimated as corresponding to the wish of entrepreneur and on the other hand a group where only few have the desired qualification.

The reflection of such estimation of the employee find expression in the formation of complex (due to the relative high educational level) and at the same time non-uniform and even contradictory value systems and relations – the core of every culture. The formed OCs are significantly affected by external influences that is indirectly proved by the recognition that the personnel acquires their knowledge and skill from the existing educational system in the same degree as from the in-company practice. Here we have to point the adoption of values from another OCs – process natural for enterprises where part of the people built up their skills trough work in another companies.

The entrepreneurs' awareness of the OC influence on the growth management is based on values as adoption of new ideas, tolerance to different points of view and responsibility taking. However this awareness blows over with the practice observed in the growing SMEs – only in few cases the employees are treated in the manner the entrepreneurs claim it should be.

With certain conventions this phenomenon can be explained with the presence of ill understanding of the mechanisms through which an OC is being created and developed. The study covers the following directions: the degree of SMEs intervention in the shared values, feelings and behavior, the priority given to the firms' goals, and the importance given to certain characteristics of the employees.

It is obvious that in the most cases as first priorities are pointed out such as customer satisfaction, product quality and goal achievement – all of them can be summarized as market-oriented. The next according the average-weighted evaluation priorities are the fight with competition and personnel development. For some SMEs the second priorities are the technological advantage and integrity. As least important entrepreneurs shows the social contribution and company excellence.

As most often and highly valued employees' characteristic is pointed out the loyalty. Another important characteristics are the creativity and analytical abilities, initiative, experience and moral qualities. Less attention entrepreneurs paid to the non-standard thinking, entrepreneurial and managerial skills of the rest in the enterprise. This comes to prove that a mixture of purely pragmatically grounded values on one hand and often claimed success factors on the other side exist in the studied OCs.

Finally we can outline that in the most cases the entrepreneurs do not provide conditions to motivate employees performance, there is too small delegation of authority and only few entrepreneurs are disposed to share part of the equity with his employees – all of these being factors for successful growth management.

The conclusion that comes is that the creation of relevant OCs in the growing SMEs will be a long and difficult process, which is reflection of the arduous changes in the society, of its values and intentions.

Although the availability of such empirical evidence we need go further to a more precise and detail investigation of the presented topic.

Methodological Issues to the Presented Topic

The study of the possibilities, which OC provides for a successful growth management, causes number of methodological problems. At first place this is the lack of unanimous, confirmed conception concerning the study of the OC. A reason for this is the impossibility the dimensions of OC to be quantified in a way which excludes the subjectivity. Secondly, the variety of the great number of factors affecting OC made extremely difficult their systematizing according to the stage and the sequence of their appearance.

This problem influences mostly in searching of the cause-effective appearances in forming OC. And finally, the insufficient number analogous and close to the present thesis studies increase the risk in the search of the right methods of study.

When the research theme is focused both on entrepreneur and OC itself it is a reasonably difficult to find already made methodological construct. Particularly this difficulty arises in case of research of the interaction between entrepreneur and culture in his/her enterprise. On one the side his/her personal values as well as their influence on OC formation must be investigated which refers to methodology based on different concepts or theories than these which regard organizational culture as separate phenomenon.

When we go further, we have to take into consideration the issues following in the following areas:

Selection and sample of the research objects. Selection of objects which present the different stages of this process is needed when is necessary to study a process in development. For this reason the study will be pointed to four categories growing SMEs: at the beginning stage of growth, passing from the phase of fast to consolidated growth, successfully complete their growth firms and failures during the growth. The problems here are concerned with the isolation of the influence, which the specificity of the branch (such as environment dynamics, technology, educational requirements etc.) may have. So the sample of the study will be specified further with a view to continuing work.

Research methods. In the essence of the study is the belief of the role of the values in forming and guiding OC in correspondence to the strategy of the growth. This determines the use of detailed questionnaires, which have to reveal the values and their development under the influence of the changes in the growth process.

In order to outline the specific role of the entrepreneur and the key figures in the firm, the questionnaires have to be developed in three versions: for the entrepreneur, for the people with managerial functions and the rest of the staff. In a parallel semi-structured interviews have to be used, pointed to the self-perception of the entrepreneur as an important factor in the growth management. In order time aspect of the hypothesis to be covered from the total number in the sample a few firms (3-5) have to be selected for case studies.

Measurement and interpretation of the results. This is the field with the most "sunken rocks" and at the same time at most crucial significance for the success of such study. At the present stage the entire review of the achievements in this attitude is not finished and because of that the possible applications for the needs of the study are not presented.

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Bankruptcies of Small and Medium Enterprises in Czech Republic during the Integration Process towards European Union

Vojtěch Koráb¹

Introduction

As opposed to the situation in the World, the start of the turbulent emergence of Small and Medium sized Enterprises (SME's) in the Czech Republic can be pinpointed back to 1989. This historic milestone started the process of economic transformation, one of the main pillars of which was the privatization of state-owned property. There were two main sources of the rise of SMEs in the Czech Republic after 1990. Firstly, it was the above mentioned process, when from the dinosaurs of state-owned companies there emerged smaller independent economic units either by direct purchase or public tenders. The second source was the establishment of new companies, firstly Smells (Barrow (1994, Hisrich and Peters (1996), Hodgets and Kuratko (1992), Siropolis (1994).

The foundation of the Czech Republic presented the necessity of commencing intensive work in legislative, technical and economic areas, with the aim of creating a solid foundation for the country to come progressively in line with the countries of the European Union. Expansion of the business sphere is taking place by means of the growth and globalization of markets. In general terms business activities are shifting in the direction of a bloom in services and the trade in information, at the expense of agriculture and industry. The key to successful business often lies in reliable orientation within the enterprise culture of the region - knowledge and understanding of traditions, relationships, respected attitudes and customs, and established values.

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1. Methodology

High-quality analysis requires high-quality information (see. Zikmund (1994), Kerlinger (1993), Babbie (1979)). In view of the research topic selected in advance the following sources of information came into consideration:

1. the administrators of the bankrupts² estate
2. the banks' legal representatives
3. the CD-ROM database

I first, therefore, visited the administrators of the bankrupts' estate with a pre-defined question: **"What information can you give me about the companies which have been declared bankrupt?"** The answer was blunt. The administrators of a bankrupt's estate (if they are willing, or if the information required is not, for tactical economic reasons, secret) are only able to answer questions relating to the financial management of the company. For the performance of their activity they do not require any other information and could not, therefore, provide me with any.

I was told that limited liability companies become bankrupt on the basis of insolvency, with an important role being played by fraud on the part of the owners, taking the form of the transfer of assets to other companies or transfers into personal ownership. Another important factor is poorly implemented business planning and the related company credit policy. Another possible situation is that in which companies become bankrupt due to secondary payment insolvency.

Efforts to obtain information through bank representatives also proved unsuccessful. Although each individual bank branch has several clients, who have been declared bankrupt, they consider information on these companies to be confidential.

The names of companies which have been declared bankrupt are published on a regular (weekly) basis in the Commercial Bulletin. This information is, in essence, designed for their creditors, in order for them to register their outstandings within the stipulated period. In this case this meant selecting companies given in the Commercial Bulletin and subsequently obtaining the necessary information from the ABACUS Monitoring and ALBERTINA database. The ABACUS Monitoring database contains articles from more than 100 Czech newspapers and magazines. The following analysis is based on information taken from this source.

For the sake of accuracy it should be added that the selection of companies focused on limited liability companies. In geographical terms companies from the southern Moravia and eastern Bohemia regions were chosen in view of the possibilities this presented for their comparison. Companies were selected from the Commercial Bulletin which had been declared bankrupt in a period from 1.1.1993 to 28.2.1997.

For the sake of the greater objectivity in the results obtained the analysis also included healthy and growing companies.

² Bibliography about bankruptcy or failure see. Gerber (1997), Hall (1995), Halloran (1991) Keasey and Watson (1991), Walsch (1994), Warson (1993).

A total of 411 bankrupt companies were obtained from the Commercial Bulletin. Of these 196 were from the southern Moravia region and 215 from the eastern Bohemia region. These companies were then compared with the data available from the CD-ROM database. Since information could not be found in the database on all the companies going bankrupt the number of sample companies was reduced to 53, of which 26 were from the southern Moravia region and 27 from the eastern Bohemia region. Information was found on a total of 91 healthy and growing companies.

All the information obtained was classified and evaluated in accordance with a questionnaire prepared in advance. A written and graphic evaluation was then performed.

2. Questionnaire

Using the questionnaire evaluation was performed on all the information obtained from the CD-ROM database; this separately for each individual company.

The questionnaire describes four areas (see. Cinca (1996), Dimitras, Zopounidis and Burson (1995)):

A - the management of the company

B - company operations

C - the financial health of the company

D - the area in which the company conducts business

Concrete questions were then asked, the answers to which are assigned to one of the following classifications:

- low
- medium
- high
- unknown

This classification is specified in more detail in the following chapter.

Questionnaire (general statement)

A: The management of the company.

1. What are the qualifications of the management?
2. What are the skills of the management?
3. What are the ages of decision-making management representatives?
4. What share of the basic capital of the company is held by the management?

B: Company operations.

1. What is the market share of the company?
2. What is the quality of its products or services?
3. How many employees does the company have?

C: The financial health of the company.

1. What is the total liquidity?
2. What is the total level of indebtedness?

D: The area in which the company conducts business.

1. What is the level of prosperity in the sector in question?
2. What effect does the company have on the environment?

3. Characterization of the Results Obtained

The aim of this chapter is to present a more-detailed specification, some kind of scale of assessment, against which the individual companies were compared. The information assessed was then inserted into the following tables. I will also give a brief description of the results produced with reference to the graphic appendices.

Key to tables:

- SMR - companies going bankrupt in the southern Moravia region.
- EBR - companies going bankrupt in the eastern Bohemia region.
- BR - healthy and growing companies in both regions.

Management Qualifications

Scale of assessment:

- low - primary education
- medium - secondary technical college, secondary technical school with school - leaving examination, university education in another field
- high - university education in the field in question, possible additional CSc. or MBA, or special course

Table 1. Management qualifications

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%
SMR	1	4	5	19	1	4	19	73
EBR	3	11	3	11	5	19	16	59
BR	1	1	85	94	3	3	2	3

A higher percentage of high management qualifications is seen in companies going bankrupt in the eastern Bohemia region. Medium qualifications predominate in the southern Moravia region.

Management qualifications in healthy and growing companies fluctuate around the medium level.

In general terms it can be said that an education of a medium level predominates among company founders (management). All population groups are represented here.

Management Skills

Scale of assessment:

- low - unsatisfactory skill levels (large number of mistakes, punitive damages, fines, claims ...)
- medium - satisfactory skill levels
- high - above-average skill levels (business success, awards ...)

Table 2. Management skills

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%
SMR	16	62	6	23	0	0	4	15
EBR	16	60	7	26	2	7	2	7
BR	1	1	47	52	43	47	0	0

A predominant percentage of unsatisfactory skill levels is to be seen in companies going bankrupt. This percentage is roughly the same for both regions. Small businesses go bankrupt because demands of the most varied nature are placed on businessmen, which are not then taken on. Either problems arising (e.g. record keeping) are underestimated, and subsequently mount up, or the businessmen in question are not capable of confronting these problems. In the final analysis the only means of defense is the versatility of the businessman, who, in his initial period in business, does not have access to specialists for the resolution of varied activities. One of the great problems facing management is the selection and training of staff. The inability of managers to obtain the necessary economic information in good time can also not be overlooked.

Satisfactory and above-average management skill levels are to be found in healthy and growing companies. It can, then, be seen that a managerial team of high quality and competence, allied to a systematic past education, can make a significant contribution towards ensuring business prosperity.

The Age of Company Representatives in Decision-Making Positions

Scale of assessment:

- low - 18 - 27
- medium - 28 - 48
- high - 49 - 75

Table 3. The age of company representatives in decision-making positions

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%

SMR	0	0	4	15	2	8	20	77
EBR	0	0	4	15	3	11	20	74
BR	4	4	18	20	20	22	49	54

The predominant ages in companies going bankrupt in both regions are between 28 and 48. A generally higher average age can be seen in healthy and growing companies, a factor associated in general terms with anticipated higher levels of skill among managerial staff.

The Share of the Basic Capital of the Company Held by the Management

Scale of assessment:

- low - 1 to 9 %
- medium - 10 to 48 %
- high - 49 to 100 %

Table 4. The share of the basic capital of the company held by the management

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%
SMR	2	8	1	4	16	61	7	27
EBR	2	7	0	0	15	56	10	37
BR	0	0	22	24	23	25	46	51

In companies going bankrupt in both regions there is an excessively high percentage of a company management share above 49 % when compared with healthy and growing companies. This is predominantly true of small companies with a small number of employees, facing their first crisis or the delegation of full powers (one-man companies) - the largest number of bankruptcies can be seen in this initial phase.

Market Share

Scale of assessment:

- low - 1 to 19 %
- medium - 20 to 38 %
- high - 39 to 50 %

Table 5. Market share

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%
SMR	23	88	1	4	0	0	2	8
EBR	26	96	0	0	0	0	1	4
BR	11	12	20	22	59	65	1	1

Companies going bankrupt in both regions account for a low market share. The difference in size of market share between companies going bankrupt and growing companies is evident at first glance. Many companies going bankrupt perform, for example, poor research of the market on which they intend to focus. Businessmen may also underestimate

the importance of the location of their premises or make an unreasonable estimate of expected sales. The last, but by no means least common, case is that in which the owner lives under the continual delusion that the only way of obtaining clients is by means of pricing, etc.

A specific characteristic of healthy and growing companies is their high market share.

The Quality of Products or Services

Scale of assessment:

- low - low (claims, complaints, court action, prosecutions ...)
- medium - medium
- high - high (awards, medals ...)

Table 6. The quality of products or services

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%
SMR	13	49	8	31	3	12	2	8
EBR	12	44	7	26	7	26	1	4
BR	8	9	45	50	24	26	14	15

Companies going bankrupt tend to fall in the categories low and medium. They have, on the whole, a single small product area. This is generally complemented by other aspects - unsatisfactory experience levels, low product and service quality, the acquisition of a small market share, etc. A disinclination toward innovation is also often seen. A paradox is, however, a tendency towards being carried away by new technology and products, which can also be a cause of lack of business success.

Healthy and growing companies, on the other hand, are characterized by medium and high product or service quality, which is accompanied by an increase in competitiveness.

Number of Employees

Scale of assessment:

- low - 0 to 99 employees
- medium - 100 to 499 employees
- high - 500 or more employees

Table 7. Number of employees

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%

SMR	21	80	1	4	1	4	3	12
EBR	13	48	8	30	2	7	4	15
BR	81	89	6	7	3	3	1	1

In comparison with the eastern Bohemia region there are more "micro-companies", companies with a single man before delegation, among the companies going bankrupt in the southern Moravia region. As a general rule it can be said that limited liability companies tend to have a small number of employees.

Total Liquidity (current) = current assets / short - term liabilities

Scale of assessment:

- low - 0 to 1.4
- medium - 1.5 to 2.5
- high - 2.6 to 8

Table 8. Total liquidity

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%
SMR	19	73	1	4	0	0	6	23
EBR	22	81	3	11	1	4	1	4
BR	9	10	53	58	29	32	0	0

A clear feature of companies going bankrupt is low overall liquidity. In cases in which financial difficulties arise companies are not able to settle their obligations. These companies have either underestimated the required level of investments, or have failed to express sufficiently the total costs of initiation or operation. The excessively costly initiation of business may have occurred, with the money put in not being recovered.

In healthy and growing companies total liquidity grows, fluctuating at a level of 1.5 to 2.5 - which is an optimal level.

Total Indebtedness = (foreign sources + other liabilities) / total assets

Scale of assessment:

- low - debt of 0 to 39 % of company assets
- medium - debt of 40 to 75 % of company assets
- high - debt of 76 to 150 % of company assets

Table 9. Total indebtedness

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%

SMR	0	0	6	23	19	73	1	4
EBR	0	0	3	11	20	74	4	15
BR	51	56	37	41	3	3	0	0

As soon as a company becomes one of the best in its field its total indebtedness falls. The factors with which this is associated include total liquidity. Beginners in business often use the cash flowing into the business for their own person or family, with this money subsequently lacking for the payment of accounts from suppliers. If the indicator of indebtedness is high, as is the case in companies going bankrupt, it is practically impossible for the company to obtain the necessary subsequent financing, which leads to irreversible decline. This matter is also closely related to overall poor payment discipline.

The Level of Prosperity in the Sector in Question

Scale of assessment:

- low - sector in decline - e.g. agricultural production ...
- medium - constant, sector showing slight growth - e.g. industrial production
- high - growing sector - e.g. the trade in information ...

Table 10. The level of prosperity in the sector in question

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%
SMR	19	73	5	19	1	4	1	4
EBR	16	59	8	30	0	0	3	11
BR	19	21	37	41	22	24	13	14

Companies going bankrupt tend to fall in the low or medium categories in relation to the level of prosperity in the sector in question. Healthy and growing companies tend to be found in the medium prosperity category. It can be stated here that the branch specialization of small and medium-sized companies differs considerably from that seen in western Europe. While services predominate in the developed part of Europe, businessmen in this country are heavily represented in production and the building industry. In comparison with the EU there is, in the Czech Republic, relatively small representation in the distribution sector and in hotels, restaurants and supplying.

It is worth considering here the question of experience obtained before the commencement of operations relating to the anticipated branch of business. Many businessmen go bankrupt due to an absolute lack of experience or due to having very little experience in production or services before going into business.

The Effect of the Company on the Environment

Scale of assessment:

- low - high expenditure on environmental protection

- medium - medium expenditure on environmental protection, low punitive damages
- high - no or small expenditure on environmental protection, high punitive damages

Table 11. The effect of the company on the environment

	Low		Med		Hig		Unknown	
	Number	%	Number	%	Number	%	Number	%
SMR	7	27	6	23	11	42	2	8
EBR	10	37	4	15	9	33	4	15
BR	51	56	32	35	8	9	0	0

Companies going bankrupt in the southern Moravia region provide lower expenditure for environmental protection than companies in the eastern Bohemia region. This issue does not relate solely to insufficient legislation, but, first and foremost, to the attitude of each individual.

Healthy and growing companies tend to make high or medium expenditure on environmental protection in comparison with companies going bankrupt.

The Most Important Discoveries Arising from the Analysis

The regions analyzed can be said to be almost identical. Mention could be made here of the fact that there was, among the companies going bankrupt in the eastern Bohemia region, a slightly higher percentage in the area of better qualifications and skills, and a higher average age of those in decision-making positions, which is closely associated with the provision of products or services of a higher quality. More medium-sized companies go bankrupt in this region than in the southern Moravia region, where a greater number of small companies are in decline. The analysis also shows that companies going bankrupt concentrate predominantly on the low and medium state of prosperity in the sector, and that these companies generally underestimate the ecological aspects of business.

In terms of people, i.e. those whose activity is decisive in the running of businesses, this analysis is understandably concerned with those in management. Their ability, skill and interests are key quantities. An evident weakness among managers of companies going bankrupt is an absence of real managerial skills and experience, and their insufficient qualifications, which corresponds with their relatively young age. In the better cases these characteristics are generally supplemented by technical or mercantile ability. A characteristic of managers of healthy and growing companies tends to be their significantly greater flexibility and their capability for market behavior, a more positive attitude to change and rapid action.

The analysis shows that in both regions the majority of companies going bankrupt are small companies with a small number of employees, facing their first crisis, in most cases the result of a high share in the basic capital of the company being held by those in management. Companies going bankrupt largely concentrate on medium to low quality. This is directly related with their obtaining a small market share.

A more profound analysis of companies going bankrupt would, in all probability, lead to the conclusion that the common root (primary) cause of many of these failures is the insufficient quality of their management. On the basis of their skill, knowledge, ability to learn from past mistakes and successes and the pressure of the business environment, the

management perform particular operations influencing the financial health of the company, which results from their actions. It can clearly be stated that companies going bankrupt have low overall liquidity, which is, on the other hand, related to high overall indebtedness.

In this regard this analysis deserves the attention of those in management, particularly at the present time, when the market nature of the economy of this country is being reinforced and a demanding competitive environment being created.

As has already been stated the skills or insufficient quality of those in management lies at the heart of the majority of company problems. I would, in following, like to give a list of factors to which those in management must pay close attention, since they can lead to bankruptcy on the foundation and operation of small and medium-sized companies.

For the reasons analyzed above these factors relate to both regions under consideration.

- poor marketing
- the inability to obtain accurate economic information in good time
- insufficiencies in organization and management
- the inability to keep records
- staff problems
- the poor quality of products and services associated with a disinclination towards innovation
- bad financial and investment policy
- other factors

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Economies in Transition and the Variety of Capitalisms

This book is a result of the 5th Biannual Conference of the European Association for Comparative Economic Studies "Economies in Transition and the Variety of Capitalisms: Features, Changes, Convergence" held in Varna, Bulgaria, 10-12 September 1998. It includes 28 papers from all discussed fields during the conference. The authors are well-known scientists from Western Europe, Central and South-Eastern Europe and Baltic countries, as well as young scientists which ideas and findings bring interest at the discussions.

This book will meet the interest of scientists, students, policy-makers and businessmen and will contribute for their better understanding of the complicated processes which run now in Europe.