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András Inotai[1]

EXPERIENCE WITH AND LESSONS FROM THE FIRST YEARS OF EU MEMBERSHIP – THE HUNGARIAN CASE

The accession of ten new countries to the European Union in May 2004 did not produce any major problem in the everyday functioning of the integration. At the same time, in the new members, no wonder happened either.
Most of the negative expectations linked to accession proved unjustified or mainly due to deficiencies in the preparation for membership. The article analysis the impact of accession on growth, inflation, employment, small- and medium-sized companies, regional development, budget and political sovereignty. The main conclusion is that eventual negative developments cannot be linked to EU accession but to home-made economic policy failures in the previous years. Of course, it is always easier to blame external factors, including now Brussels for own mistakes. In other areas, where membership created a new situation, the expected impacts could be identified well in advance (e.g. sovereignty).
A separate chapter deals with the two-year balance of accession. Trade with the new member countries shows a dramatic growth, particularly in exports. As a result, the traditional trade deficit turned to a substantial surplus within a period of two years, indicating the (regional) competitiveness of the Hungarian economy. The success of adjustment can be proved by the smooth transposition of EU directives and guidelines related to the internal market. Less promising were Hungarian developments concerning the main objectives of the renewed Lisbon agenda. In turn, Hungarians were successful in applying for higher positions in different EU institutions. Also, level and structure of utilizing EU funds can be considered satisfactory, excepting the delayed direct payments to farmers.
With membership, Hungary became a policy-shaper of EU decisions and politics. In the first years, however, this manouevring room has not been adequately used, since the traditional, historically rooted unilateral policy-taker behaviour and mentality could not yet be overcome. Another important problem is the deeply divided Hungarian society between two basic political parties and strategies that does not only appear in the different approach to global and European developments but seriously hinders the identification and implementation of Hungarian strategic interests in the enlarged European Union.
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Introduction

After about two and a half years of full membership (although with transitional periods in several important fields, such as direct payments for farmers, EU budgetary transfers, Schengen or monetary union) first experience gathered after the accession to the European Union (EU) in May 2004 can be summarized. Not less importantly, also some lessons can be formulated for future members on how

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to get even better prepared, how to make best use of the pre-accession period and what should be avoided in the aftermath of accession. The following considerations are based on personal experience with the Hungarian case, although, most frequently, other new member countries could identify the same or very similar impacts.

Despite some smaller differences negotiated in the national accession treaties, all countries of Central and Eastern Europe (CEE) entered the EU with the same conditions and the same expectations. Concerning the latter, it was obvious and self-evident what kind of a European integration they wanted to join. Such a question did not form part of any discussion before membership, including the national referenda. All countries wished to become member of an EU that:

(a) is open to the world in general, and to the continuation of the enlargement process within the geographic boundaries of Europe, in particular,
(b) is characterized by a predominantly future-oriented attitude instead of turning back to the (not so glorious) past of the continent,
(c) can prove its competitiveness in the global economic, and increasingly also political, framework,
(d) remains solidarian to the new members that, without any exception, had a lower level of development, at least as indicated by per capita GDP figures.

It is not the goal of this paper to examine to what extent the EU could satisfy the above expectations. Also, deviations in the expectation pattern of the individual new members will not be studied here. Of course, such a separate survey would be extremely important and timely, even if the time horizon to draw longer-term conclusions seems to be too short. Namely, European values, the „mission" of the integration and the leadership question should undergo a fundamental discussion and, as a result, a clear reorientation of European integration. However, the aim of this paper is much less demanding. It focuses on two issues. First, it tries to highlight the experience with membership based on the developments and the adjustment process realized between May 2004 and September 2006. Second, and based on such experience, it intends to put together some conclusions and recommendations to future members.

Experience with membership

(a) A methodological remark has to be made in advance. New (and old) member countries are by far not only influenced by the developments in the process of European integration. There are at least three levels of factors that influence the behaviour, the manoeuvring room, possibilities and limits of a given member country. First, global developments affect all member countries, even if not always simultaneously or with the same strength. Second, as members of the integration all of them are influenced by different integration policies. Third, and not least importantly, domestic processes, economic, social and political pressures constantly shape both the situation and the public opinion in the respective country. Thus, the impacts of integration can hardly be separated from other influences. This, however, generates a complicated picture in which it is not easy to separate global, community-level and national factors. Even worse, one has to face constantly the temptation that all, and mostly adverse (or negatively felt) developments can be attributed to the European integration in general, and to Brussels, in particular. It is an overall

and lasting experience that both politicians and part of the public opinion used to opt for the easier solution of explaining why some expectations could not be fulfilled. In a historical retrospective, it has always been easy to find an external factor that could be made responsible for the mistakes of local policy-makers, be it a foreign power exercising direct or indirect influence on the given country or an international institution (e.g. IMF, World Bank, etc.). Without trying to honestly separate different influential factors it is not only very difficult but also highly misleading to make an objective and balanced analysis of the role of the EU and the experience with accession. Evidently, in some cases, the direct and not always benign impact of Brussels can be identified. The European integration does not develop always in the direction most or some member countries would like to anticipate. However, in most cases it is a member country's resistance that blocks progress. In addition, it is often forgotten that decisions on the community level are not made by the Commission, independently from the member states, but are the result of compromises among „national interests" achieved in inter-governmental discussions (Council).

(b) In most CEE countries, accession expectations were accompanied by several fears and anxieties, many times artificially exaggerated by opposition parties. Such fears included higher prices, more unemployment, massive bankruptcy of small and medium-sized domestic companies, net contribution to the EU budget and the loss of political sovereignty. Needless to say, such adverse developments did not take place. If, still, some negative impacts could be felt, they were mainly due to other factors, including global developments (higher energy prices) and mistaken or several times postponed domestic economic policies (price subsidization, large share of state-owned and artificially kept companies, protected economic environment to otherwise uncompetitive small and medium-sized firms, or, most frequently, the time-related interaction of integration and (delayed) transformation impacts. To be sure, high growth rates in general had little to do directly with accession. They have been – and still are – the result of successful transformation, belated catching up, the availability of hidden productivity reserves, structural change and, can, of course, also be attributed to the low starting level of economic development (mainly in Southeastern Europe and in the Baltics).

Price changes due to world market developments (e.g. oil and gas) or to shifts in the national price policy (e.g. lifting or maintaining of price controls) have nothing to do with accession. In addition, most countries have entered the EU with a largely open, liberalized economy, in which adjustment to world market prices occurred well before 2004. Membership-related price changes were constrained to higher excise duties on tobacco and alcoholic beverage well before membership (as part of the conditions negotiated earlier and incorporated into the accession treaty) and to the harmonization of the value-added tax system (the abolition of the zero tax bracket on a few commodities but mainly on selected service activities). On the other hand, membership contributed to lower prices due to two factors. First, with very few exceptions, national external tariffs were higher than the EU common external tariff that had to be implemented from the very first day of membership. Therefore, the prices of imported goods were reduced. It is another question, how much the

final consumer could perceive from the price reduction, since the gain from the tariff difference could be realized by or distributed between the exporter, the importer, the domestic distributor and the user of imports by a domestic manufacturing company. Second, keener competition, particularly in the rapidly spreading retail channels, has definitely constrained any effort to increase prices and started to develop a „competitive price reduction" campaign (and „culture").

Employment levels did not change substantially. Countries with high unemployment remained characterized by high figures, while those with relatively low unemployment did not report relevant changes either. This can be explained by the fact that all new members started a fundamental adjustment process at least a decade before EU accession and were able to carry out most employment-related structural changes at due time. In case lower unemployment figures can be observed, this phenomenon is more connected with emigration of the local people to those EU countries that opened up their national labour market than to a substantially changing domestic environment. Neither the slightly increasing unemployment figures in Hungary (from 6.2 to 7.5 per cent that is still the second lowest official figure behind Slovenia and much better than the EU average) can be directly related to EU accession. In the background of such development one can find the changing domestic structure of social benefits that became dependent on the registration of every beneficiary in the respective labour office as a person who is unemployed at the moment but is looking for job opportunities. Still, in the next years, partially and temporarily higher unemployment cannot be ruled out in any of the new member countries. This could result from the unavoidable capital concentration after more than 15 years of transformation that would force a large number of small (in many cases one-person) companies to give up their previous activity or join larger production or service units. This is a fundamental precondition of preserving or further strengthening competitiveness. The role of EU membership is indirect, since it forces companies to remain or become competitive. However, the EU does not directly affect the way in which higher competitiveness should be reached.

Other fears concerning budget and political sovereignty will be shortly addressed in the next paragraphs.

(c) One of the most visible impacts of membership could be identified in trade relations. Certainly, all new member countries had been reorienting their trade relations towards the EU from the first half of the nineties. At the moment of membership, some countries, as the Czech Republic, Hungary, Slovakia and Slovenia had a much higher EU share in their total exports (and imports) than most „old" EU members. Also their level of trade openness approached that of the smaller EU-15 countries. Due to the free trade framework practiced after 2001, accession was not expected to generate huge additional trade creation impacts. Still, substantial and positive developments occurred in four areas. First, the full liberalization of trade in agricultural products started at the moment of membership. The immediate impact was a dramatic increase in agricultural trade, both exports and imports, although with different country-related features that were by far not disconnected from the agricultural policies and the export potential of the given country (Polish exports did much better

than Hungarian ones). Second, in many areas, trade in services experienced a dramatic increase, even if comprehensive and comparable figures are not yet available. Third, small- and medium-sized companies became substantially more active, due to the high level of legal and institutional security provided by membership. Fourth, and finally, the most dramatic change happened in trade among the new member countries. On paper, the Central European new members had a free trade agreement, however, it has never been fully implemented. On May 1, 2004, however, all new members had to transfer their national trade policies to Brussels. In consequence, no more protective measures could be applied in their trade with each other. As a result, regional trade among new members skyrocketed and the share of them in the respective total exports and imports grew substantially. In addition, partly also previous trade patterns started to change, including the commodity structure or the bilateral trade balance. For Hungary, between 2004 and the first half of 2006, the share of trade with the new members (excluding Cyprus and Malta) in total trade registered an increase from less than 9 per cent to 12 per cent in exports and an increase from 8 to 9 per cent in imports. Not less importantly, traditional trade deficit (about Euro 550 mn in 2004) was converted into substantial trade surplus (Euro 540 mn in the first half of 2006), with a net improvement of Euro 1.1 bn in the trade balance with the new members.

(d) For several reasons, the attitude of foreign direct investments (FDI) did not change substantially as the result of accession. First, investment decisions have anticipated membership well before the political decision was taken or the accession treaty was signed. Most companies that wanted to be located in the region did it well before and in the strong conviction of EU membership of the respective country. Second, concerning the behaviour of FDI, the new member countries can hardly be compared, since they were at different levels of attracting foreign capital (from privatization over green-field investments to extension of previously started activities). Also, the market orientation of FDI indicates differences (domestic market- vs. regional or global orientation). Moreover, figures on capital inflow are misleading, since they do not include reinvested profits that used to become the main instrument of financing FDI in countries that opened up first to foreign capital and could develop a highly sophisticated structure of foreign enterprises in their national territory. Third, investment decisions of FDI take into account a number of important factors that have little in common with EU accession. The general political, legal and economic environment, the availability of key production factors (not least skilled and flexible labour), the size of the targeted market, the level of development of physical infrastructure or the geographic location of the country used to be more important considerations than EU membership. In order not to be misunderstood, it has to be stressed that EU membership does matter, but it cannot compensate for inadequate host country policies.

(e) One of the most interesting impacts of EU membership can be observed in the EU labour market. During the official negotiations, Brussels (and the member countries) implemented restrictions in the way of the free flow of labour upon accession that individual member countries can extend for a period of up to seven years (in three stages). In May 2004, three countries, namely Great

Britain, Ireland and Sweden have opened up their national labour markets to the citizens of the new member countries. Other countries insisted on different levels of restrictions and controls. After two years of membership, some figures are available. They reflect a fundamentally diverging attitude to „migration" from the new members. While about 400.000 Poles were registered in the British labour market (part of them used to work in Britain earlier, and they could „legalize" their work after membership), only a very modest migration took place from Slovenia (about 3.000 people), Hungary (12.000) but also the Czech Republic (22.000). In turn, Slovakia with half of the Hungarian population reported 50.000 migrants (not including the figure of about 25.000 working in Hungary). Even more interestingly, Baltic countries with China-like economic growth rates belong to the substantive sending countries. Based on British official figures only, about 50.000 people left Lithuania (with 3.7 mn people or about 2 mn of active population) and another 35.000 migrated from Latvia (with a population of 2.5 mn and an active labour of not more than 1.5 mn in the best case). Although large income differences may explain such huge migration waves, but, at the same time, high economic growth should work against such a „current". Moreover, since most migrants belong to the younger, mostly better skilled and flexible generation, their lasting loss could seriously impair the sustainability of the catching up process in the native country. The longer term impacts of migration require a fundamental and balanced analysis, not least with regard to the Southeastern European new members, current and future candidates. In addition, lower level of domestic unemployment should not be dissociated from the net impact of migration.

(f) Although to different degrees, but all new member countries became net beneficiaries of EU transfers (having Slovenia the lowest and Poland the highest amounts). However, the current amount of money is just a fraction of what traditional net beneficiaries, as Spain, Portugal, Greece, Ireland, let alone Eastern Germany, used to get. The annual national envelopes became „richer" as compared to the money available in the pre-accession framework, but, due to the limits defined in March 1999 in Berlin, they were anything but just amounts. Since the new members joined the EU in the middle of the EU's current financial framework period (2000-2006), there was no room to major restructuring and redistribution. However, as of 2007, they will enjoy much larger amounts of EU financial support, since they could co-negotiate the total amount, structure and conditions of the new seven-year financial package (2007-2013). Concerning the 2004-2006 period, some important points can be highlighted. First, there is a natural discrepancy in the time sheet of payments to the common budget and transfers from it to the given country. Payments are due the first of every month (in 12 instalments annually) and are automatic and obligatory. In turn, EU transfers are neither evenly distributed in time nor automatic. The amount always depends on the projects that are carried out with EU money (and national cofinancing). In this way, periods can always be found where the balance between „expenditure" and „income" does not necessarily point to a net beneficiary position. However, on the annual level, and increasing with the years, the beneficiary position becomes more and more evident also in financial terms (since multi-annual projects used to get

part of the EU money after finishing the undertaking). Second, the farmers became immediate and evident winners of membership. Although they had to start with 25 percent of the sum paid out to the farmers of the EU-15, their income situation improved dramatically. Again, cross-country differences have proved important, due to the different quality of the national institutional system (including the timely and professional setting up of the payment agency). Also, the income level of the farmers showed marked differences from country to country. Polish farmers became the largest beneficiaries to such an extent, that their overall anti-EU behaviour before membership turned into a substantial pro-EU attitude within a period of less than two years. According to official figures, the income of the Polish farmers doubled, while this indicator increased by 70 percent in the Czech Republic and by about 30 percent in Slovakia and Hungary, respectively. Third, the real challenge to be faced will be arriving with the efficient spending of the much higher amount of EU transfers available after 2007. In the Hungarian case, the national envelop covering the seven year financial period contains Euro 22.6 bn (or more than Euro 3 bn on an annual average).

(g) Beyond the well-known macroeconomic figures, the impact of accession can be measured on a number of other levels as well. Some of these indicators may even be more telling concerning the level of integration maturity and adjustment capacity of the given country than macroeconomic features. They can be considered as important factors of the sustainability of longer-term processes and an element of assessing the degree of „successful membership" a few years after the date of accession. Here, three areas will be shortly mentioned, while two fundamental fields with concrete requirements and longer-term preparation (Schengen and eurozone) will not be covered in this paper. First, all member countries have to apply the basic rules of the EU's competition policy. Those companies that violate these rules, will be warned an, in case of not adjusting themselves to the acquis communautaire, their case will be put forward to the European Court. Most probably there is a correlation between microeconomic performance on the one hand, and the number of issues dealt or to be dealt with by the Court. Higher level of „integration maturity" used to be accompanied by less problematic cases and viceversa. In fact, in the first year of membership, the Court had to deal with 41 Czech problems but only with 12 Hungarian ones. Evidently, a more fundamental assessment can only be carried out after several years of experience. Second, all member countries have to transpose EU legislation into their national law system. In this framework, particular attention is paid to the EU directives and other legal acts on the liberalization of the internal market. In this comparison, some new member countries (such as Lithuania or Hungary) are not only among the best performers but are better placed than several „old" members. Again, a more convincing survey requires some years of experience. However, it can be stated that the new member countries did not find fundamental domestic barriers to rapid and successful application of new EU rules. Nevertheless, the underlying reasons may fluctuate in a wide range, from high level of adjustment capability to lower level of resistance by economic interest groups or ossified institutional structures, due to the positive and negative consequences of transformation (e.g. weak institutions, modest

bargaining power of trade unions and other interest organizations, large number of „empty holes" in the national legislation, etc.). Third, the Lisbon-related national action plans to be prepared each year by all member countries is another good criterion for evaluation. In this context, most new members struggle with serious deficiencies due to their lower level of economic development and modest domestic resources available to across-the-board economic and social modernization. Hungary is worst placed concerning the share of employed people within the active population. Also its R+D expenditures in GDP terms are far from adequate, even in comparison with the new member countries. In turn, serious efforts have been made in developing the physical infrastructure, a key element of longer term and sustainable competitiveness. Still, this generated a negative impact on the budget and confronted with another important EU requirement of bringing key national economic figures nearer to the Maastricht criteria.

(h) One of the areas in which the impact of membership can be identified quickly and in a transparent way, is the number and, not less importantly, the position of national citizens in different EU organizations. Evidently, each country can nominate one commissioner. New member countries tried to make a comparison, which could get a more influential portfolio in the Commission. In fact, and many times beyond the personal capacity of the given commissioner, the priority areas in the EU are constantly changing. For instance, in the last period, energy (under the Latvian commissioner) and tax harmonization (belonging to the portfolio of the Hungarian commissioner) have been clearly upgraded. At another occasion, when a special report is published, the role of another commissioner is highlighted (e.g. the Czech commissioner when a comprehensive study has been presented on the EU labour market and the impact of migration between 2004 and 2006). More telling is the distribution of other positions, since, within the different EU institutions there are no strict national quotas. Of course, some balance has to be observed but relevant „deviations" can constantly be identified. Considering this area as an important element of „successful integration", the Hungarian performance is among the best ones. After two years of membership, several hundreds of Hungarian experts got employed in different EU offices, some of them in leading position (general and deputy general directors). Until now, less successful proved those Hungarian initiatives that aimed at bringing a special integration agency to Hungary. (The border control agency was given to Poland, while the setting up of a technology or energy agency is still in the preparatory stage, without any decision on the location.)

(i) In the medium- and longer term, successful integration does not only imply quick and efficient adjustment to the requirements of the integration but also an active role in shaping community-level policies. Therefore, it is a relevant criterion of assessment of membership, to what extent the new member countries could participate in or suggest new EU policies and bring them to the priority agenda of the EU. In the last two years, some examples can already be identified. Poland and Lithuania played a crucial role in the development of EU relations with the Ukraine, while Hungary and Slovenia are largely committed to an efficient policy of Brussels towards Southeastern Europe, particularly concerning the Western Balkans. All CEE member

countries are fundamentally interested in developing a common European energy policy, and most of them express positive attitude towards keeping the integration open to further enlargement. Active participation in community-level policy-making is an important element of determining and identifying the new role of a member country that, at the moment of accession, had to give up part of its „national sovereignty". Of course, „national sovereignty", particularly in the case of small countries, and in the era of globalization is a more and more relative issue. However, part of the national society is rather sensitive to it, and discussion about the topic can easily end up in demagogy and populism. Therefore, the importance of the new form of sovereignty called „shared sovereignty" within the EU has to be adequately underlined. In itself, membership in the club increases the bargaining power of small countries both in international organizations (WTO) and in bilateral negotiations with large powers (USA, China, Russia, etc.). The positive impact of shared or „restructured sovereignty" can be even better communicated if a member country initiates and takes active part in shaping selected community-level policies.

Lessons with personal policy-oriented suggestions and recommendations

The next paragraphs address some critical areas in which the new member countries in general and Hungary in particular have gathered sufficient experience that can be taken into account by countries that are expected to join the EU at a later stage. At this point, it has to be stressed that there is no omnipotent and general recommendation that, at any price, should be closely followed and implemented by countries with different political, social and economic characteristics. The situation in the respective country can be different from the environment in which a suggestion originated. In addition, also the external environment is changing, including the policies and priorities of the European integration. Still, taking into account the above mentioned limits, lessons learnt in other parts of Europe can provide useful support to countries that are about to formulate and implement their respective integration-related strategies.

(a) One of the biggest mistake would-be members can commit (and, in fact, most of them did it in the past) is to stop adjustment to and preparation for membership at the moment of successfully finalizing accession negotiations and/or signing the accession treaty. One should not forget that candidates are expected not only to become full member but also a successful member of the community. This is in the interest of the given country as well as of the previous community. Therefore, at the latest after finishing negotiations, a national integration strategy has to be elaborated that not only determines the roadmap to full membership and beyond it in the areas covered by transitional arrangements. It should identify the basic strategic goals of the new member country in all key areas of European integration. Further institution-building and the definition of the most adequate instruments and methods to achieve the strategic goals should follow.

(b) Most of the crucial domestic reforms that influence „successful membership" should be initiated or largely implemented before accession. Part of the reform pressure is clearly originating in adjustment to the EU rules. However, another part is not directly linked to the acquis communautaire, sometimes because

the latter is still rather „empty" in critical reform areas under national competence (education, social and health issues, taxation, etc.). Early domestic reforms offer two basic advantages. On the one hand they help avoid „reform and adjustment congestion". Following accession, the new member country, even if best prepared (on paper), will be facing a number of new challenges and adjustment pressures. If the major initial and by far not always positive impacts of the domestic reform overlap in time with the additional external adjustment pressures, both policy-makers and the society is likely to experience additional costs that, otherwise, could have been distributed in time. Moreover, the mixing of domestic and EU pressures can easily lead to a situation in which the society of the new member country may soon become disappointed with long-awaited membership because part of the new problems will automatically be associated with Brussels. On the other hand, the degree of efficient utilization of EU transfers is positively correlated with the level of domestic preparation. Successfully reformed areas of economic and social activities regularly have a higher level of absorption capacity, promise quicker return and generate substantial multiplier effects.

(c) At least in the financial framework covering the period between 2007 and 2013, new member countries will dispose of huge amounts of financial resources for socio-economic modernization. However, the efficient utilization of the transfer requires very careful and comprehensive preparation. First, goals and instruments should not be mixed up. EU transfers represent a historically unique instrument but they are not the basic objective. The latter is understood as sustainable and successful modernization - among others, with the help of EU funds. Second, national development plans, as the basic framework requirement of Brussels in order to have access to money must not replace the national strategy on successful integration. On the one hand, the development plan does not cover all and highly significant areas of integration policy (only those that are linked to EU transfers). On the other, additional EU money is available also outside the operational programs contained in the national development plan. There are a number of community-level funds that have not been distributed among the member countries but will be used according to the best offers and potential contributions made by the member countries (e.g. neighbourhood policy, international aid programs, foreign policy priorities). Third, adequate national cofinancing has to be assured. This should not only guarantee the necessary amount of national money but has to provide additional resources in case of overcoming liquidity shortage, since, in many cases, EU transfers may be delayed or subject to strict control before payments are allowed. Fourth, sometimes EU priorities of funding and national priorities of development may be not fully covering each other. Thus, fine-tuning of key objectives seems to be an extremely important and delicate issue. Fifth, the criteria of successful absorption of EU transfers have to be defined. Is the basic aim just to spend the available money without any objection by Brussels? Or should successful termination of a given project become the „benchmark"? What about the process of self-sustained development following the first and EU-financed stage of a project? Will it become an island, a project with further demand for additional EU support or can it start a self-fuelled development without any further subsidy? And finally,

what are the indirect (spill-over) impacts of EU-financed projects on different other economic and social activities as well as the general attitude of the society?

(d) All new and would-be member countries are struggling with high level of regional differences as expressed in income, development level, structure, employment and even mentality. Regional differences sometimes produced by and inherited over centuries, cannot be ironed out in a short time. On the contrary, and despite more money to be channelled to less developed areas, the first years of membership may even enhance such differences. Such a temporarily growing gap can be explained by the difference in absorption capacity. Higher developed regions can attract additional resources easier and, in fact, promise quicker return and higher efficiency. In turn, less developed regions many times miss the critical minimum of efficient resource utilization. Therefore, a double and parallel strategy can be offered. On the one hand, EU funds have to be channelled to projects with high efficiency and able to generate spill-over effects. On the other hand, less developed areas have to improve their absorption capacity in order to be able to find an interface once the spill-over effects of more developed regions become manifest. Of course, large-scale development of the physical and human infrastructure can substantially increase the absorption capacity of less developed regions and reduce the time required to create the necessary „interface".

(e) Successful membership and efficient interest protection or implementation requires new and cooperative behaviour from the new member country. Although, in some cases, each member country has its veto right, it would not be very wise to start membership with making use of this possibility. Just the opposite, particularly small countries with limited individual influence on decision-making should be advised to look for strategic and tactical alliances with other (including also large) member countries. In contrast to traditional bilateral talks or, even more, to intolerant attitudes experienced in the domestic political arena, the EU is based on a „compromise culture". Specific interests can better be represented in alliance with others, while vetoing can easily push a country into the corner, without the expected and needed support in a number of other issues that may turn out to be highly important for the given country at a later stage of the decision-making process.

(f) In many aspects, membership differs from pre-membership status. Paradoxically, as shown by some examples provided by the new member countries, there is more manoeuvring room to negotiate special treatments (or additional temporary exemptions) than during the official negotiations. However, such an instrument has to be used carefully and special requests must not be exaggerated, either in the number of cases or the quality of the request. Simultaneously, accession deprives the new member of some control instruments at its border. Imported goods will not be allowed to be investigated at the border station, so that dangerous commodities may enter the national market. This, in fact, several times happened in CEE, mainly with unhealthy to poisoning food products and, most recently also with the transport of larger volumes of garbage to be processed in the new member country or to be delivered further to other non-member countries. Therefore,

because of the missing border control the safety control – mainly in the field of consumer protection and environmental safety - has to be substantially enhanced.

(g) Following accession, the previously (largely) one-sided, policy-taker status will change to a mixture of policy-taker and policy-maker status. This is a qualitative difference that, in many cases, still seems not to be overcome by the new member countries. In fact, they were accustomed to the policy-taker position during many centuries of their history (sometimes with short and lucky interruptions). The pattern of negotiations on accession did not change this picture either, since membership was conditioned by unilaterally taking on the rules of the game of the „club". In legal and institutional terms, this situation changed dramatically at the moment of accession (of course, excepting the policy areas with transitional arrangements or specific further requirements, as membership in the Schengen zone or in the monetary union). However, most representatives of the new member countries continued to behave according to the old „fashion". The general impression that in most cases none of the member countries hindered (let alone blocked) the everyday practice of decision-making process in the EU, can be interpreted in two ways. Either, in most cases the new member countries remained „silent" because they were really well prepared and equipped with a high level of flexibility in order to protect or include their special interests into the decision-making process. Or, more probably, most of them did not dispose of any clear idea and any previous identification of strategic interests and just because of this deficiency they showed „good behaviour". (The only – and rather ambiguous -exception was the Polish veto against starting negotiations with Russia in late 2006.) In the future, a much better mix of policy-taker and policy-maker attitude has to be developed. On the one hand, all countries have to keep in mind that they are policy-takers in a club of 25 (and 27 as of January 2007), where most decisions are based on good or not so good compromises. On the other hand, and at the same time, all of them have equal rights to shape or influence the decision-making process. In this context, much more activity of the new members is needed.

(h) „Compromise culture" in the EU has to be accompanied by more prudent and intelligent behaviour at home. First, the European minimum standards on political culture have to be applied in domestic, party-politics-dominated issues. Second, and not less importantly, domestic problems must not be brought either to the Commission, to the Parliament or to the leadership of any other member country. They have to be discussed and solved at home. Presenting „family problems" on the international scene will not bring any solution nearer. Just the opposite, most other member countries would consider it as a „non-European" attitude. Even more problematic are the likely consequences of debilitating the bargaining power of the given country in the EU. Despite the overall commonly shared values and rules, each member country in the European integration tries to improve its position in each areas where such an opportunity is offered. Certainly, strongly divided nations and societies used to start with a handicap in the manifold interest implementation process with the participation of 25 (27 and more) countries. Such an attitude would be the best way towards a self-made „second-class membership".

(i) Constant dialogue with the society is a must. Unfortunately, politicians used to reduce such a discussion to the critical periods of pre-election and, if necessary, of pre-referendum on EU membership. In turn, dialogue becomes even more important after accession, at least for two reasons. First, a qualitatively new period of adjustment starts that will have fundamental impact on the success of membership. Success has to be experienced not just by a handful politicians and those experts that directly benefit from membership, and not even by those who are expected to get or have already got access to EU transfers. At the end of the day, it is (the (overwhelming part of) the society that has to benefit and has to perceive the benefits (directly or indirectly). Second, in the pre-accession period and also at the moment of accession, there is a perception gap between expectations and reality. Even if expectations are not exaggerated, all of them cannot be satisfied within a short period. Even if membership is a positive sum game (and it, certainly, is), gains and losses, winners and losers will not be distributed evenly in time, across sectors and, even less, on the level of the individuals. Therefore, constant dialogue is an indispensable instrument and forum to harmonize expectations and realities and make commonly the best use of the chances offered by membership. Such a dialogue is particularly important in all areas that incorporate strategic interests of the given country. In addition, such cooperation would definitely enhance the member country's capacity of efficiently shaping future EU policies and to illustrate at home that the country has a(n important) role in the community. Not less relevant is the multi-channel communication in increasing the efficiency of using EU funds. Successful applications and project implementations have to be discussed, similar to failures and deficiencies. A society-wide learning process has to be established. This is the best framework of avoiding or minimizing the emergence of „subsidy mentality", a well-known phenomenon in countries, regions or sectors that became long-term beneficiaries of EU funds.

Finally, membership in the EU has to make a unique contribution to the self-understanding of citizens of the given country. The deeply-rooted distinction between „we" (citizens of a given country) and „they" (those sitting in Brussels, Strasbourg or Luxembourg) has to give way to the evidence of „us". We, all inhabitants of the (enlarging) European Union, are responsible for the future of the continent. Our attitude, the fortunate or less fortunate mixture of shorter and longer term interests, the coexistence, and in critical times, the correct ranking (sequencing) of strategic priorities of European development and of member country considerations will significantly shape Europe's place and role in the globalized world of the 21st century. Moreover, we, already members of the EU should not forget about our responsibility towards other countries and societies that are still waiting for membership. It does not require any specific argument that the shape of the European integration in the next few years will crucially influence the decision on further enlargement.

Икономически изследвания
Година XVI, 2007, 1

Garabed Minassian[1]

BULGARIA IN THE EU: THE CURRENT ECONOMIC STATE AND SHORT-TERM OUTLOOK

The confidence crash in the major financial institutions, the disastrous consequences of the discretionary monetary policies of the BNB, as well as the dramatic depreciation of the national currency created the preconditions for the search and the enforcement of a radical solution – namely, the adoption of the currency board arrangement (CBA). The outcome of CBA is connected with the appreciation in the real effective exchange rate. The only economic adjustment implies that the production should look for ways to keep and increase its competitiveness mainly along the line of higher efficiency and better quality.
Bulgaria's current account has been negative for almost all the period since 1990 (more than 11% in 2005). The good news is that the international foreign exchange reserves of the country have been steadily going up. Bulgaria has managed to keep remarkable budget discipline after the adoption of the CBA. Recently, in search of incentives for economic growth there were some experiments with various tax structures.
In the conditions of Bulgarian economy the importance of the institutional factors for social and economic progress outweighs the others. The macroeconomic forecasts provide conditional projections – as a consequence from adopting one or another line of macroeconomic policy, or a given exogenous influence (for instance the dynamics of the domestic energy prices, of the major foreign exchange rates etc.), i.e. they study problems of the type "what – if". The employed simulation model is used within the framework of the LINK project.
JEL: E61; E63

Bulgaria has lived through some quite hard and controversial years of transition to market economy after the end of the 80s of the XXth century, the way most of the Eastern European countries have. Seventeen years later the country is a member of the EU (since 01.01.2007) and its economic future starts getting clearer and the outlook more welcome.

Economic activiities in Bulgaria have undergone substantial and dramatic collisions (mic activities came to 14.5%!

The deep social and economic crisis was overcome by the forced resignation of the government and holding pre-term parliamentary elections. In the spring of 1997 a clearer and more favourable social and economic outlook began to take shape. Thanks to the active suppport, given by the IMF, the long-delayed restructuring of the economy was given a start, which as a rule was felt painfully and moreover, far from unanimously acclaimed by some strata of the society. These reforms, however, had a healing effect on the economy and over the following ten years Bulgria has managed to maintain steady and relatively high rates of growth. These have proved even more valuable in view of the lower economic growth rates of the

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EU (for instance three times lower), which became a major economic and commercial partner of Bulgaria.

Figure 1). The early 90s were spent in the process of gradually shedding off all inefficent output inherited from the socilaist period which went along with substantial shrinking of GDP (for 1990-1993 the official statistics recorded a drop of 24% in GDP)! By the middle of the 90s of the XXth century there emerged some positive expectations as well as timid signs of recovery. At the end of 1994 the parliamentary elections were won by the Bulgarian Socialist Party (which had inherited from the former Bulgarian Communist Party). The latter, however, had kept some essential stereotypes of thinking and behaviour of the past despite the qualitative radical change in the economic environement and conditions. Meanwhile, the accumulated social and economic contradictions during the first years of the transition which were unsettled and changing in every respect, became ever more glaring. The governing party elite did not manage to think over the processes taking place and went on appying methods of macroeconomic management which proved inadequate to the specific conditions in the country.This intensified the crisis further more, stirring up an unprecedented financial crisis in all the spheres of social and economic life. In 1996 Bulgaria experienced a record deep slump in GDP(of –9.4%), whereas for 1996-1997 the overall shrinking of economic activities came to 14.5%!

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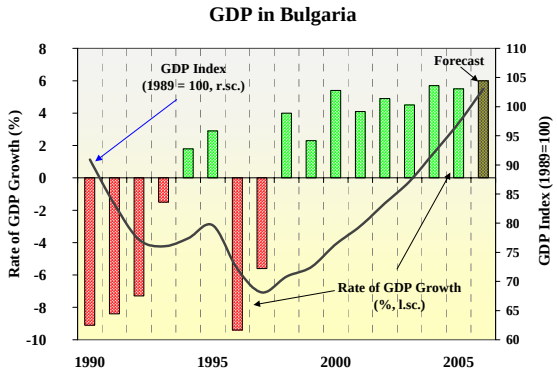
Figure 1



[2] For an overall assessment of the IMF performance you might see for instance in Минасян Г. – МВФ и страны Черноморского региона. "*Вісник Академії економічних наук України*", № 1 (5), 2004, 71-79с.

The devastating financial crisis, Bulgaria went through in the mid-90s of the last century, cleansed in a way the financial and economic structures and created the prerequisites for a new start. In the early 90s Bulgaria adopted a freely floating exchange rate but kept on having the Bulgarian Central Bank (BNB) actively intervening on the domestic foreign exchange market. The discretionary behaviour of the BNB distorted the real proportions and diluted the existing financial strains. Disparities went on accummulating and the inevitable blowing up of the seeming equilibrium was postponed indefinitely in time. Finally it really happened – in the early 1996 the exchange rate was about 70 BGL/USD, and 14 months later it went up to 3000 BGL/USD (25 times an annual depreciation of the national currency!).

The confidence crash in the major financial institutions, the disastrous consequences of the discretionary monetary policies of the BNB, as well as the dramatic depreciation of the national currency created the preconditions for the search and the enforcement of a radical solution. Actively assisted by the IMF, the transition to a new foreign exchange regime was prepared – namely, the adoption of the currency board arrangement.

There were two main options for the adoption of the reserve currency in the introduction of the currency board – the USD or the DEM. By the end of 1997 the prevalent economic conditions said pegging the national currency to the USD was necessary – at this time the prevailing part of the foreign trade settlements were denominated in USD (over 70%). What got the upper hand over it, however, was the political and economic outlook – the national currency was pegged to the DEM in the expectations to switch to the EURO a few years later without any change in the pegged foreign exchange rate. Time has proved that this decision was the right one, a decision promoting decisively the integration of the country to the European financial and economic structures. The foreign exchange composition of the foreign trade relationships underwent a substantial and consistent modification, with ten years later about two thirds of foreign trade and three quarters of the gross foreign debt of the country being denominated in EURO.

The significant depreciation of the national currency at the start during the introduction of the currency board arrangement let the real sector gradually and steadily adjust to the changing conditions. The overall price level in the country lagged substantially from that in the EU, due to which domestic inflation exceeded that in the EC too. In 1997, for example, prices in Bulgaria accounted for about 30% of those in the EC whereas some ten years later this proportion attained 40%. The engine of the higher inflation rates is both the growth in the prices of non-tradable goods (the Balassa-Samuelson effect), and the gradual convergence of the lower prices of tradable goods in Bulgaria to those of the EU.

As the logic goes the outcome of the currency board operation is connected with the appreciation in the real effective foreign exchange rate (Figure 2). The latter is a phenomenon observed in all the countries of Central and East Europe. The economic implications are manifested in several ways:

(1) Exports begin to feel a growing pressure in terms of higher production costs;
(2) Imports get increasingly more accessible and domestic consumers redirect their consumption from home goods to imported ones;
(3) Foreign tourists start finding the country less attractive from the point of view of providing them with relatively cheap (of undermined prices) tourist and any other kinds of services;

(4) <u>But:</u> The international evaluation of labor in the country goes up – people's income grows faster in international terms (EURO, USD) than their real income.

There arises an inflationary tension in production structures which is not fully reflected in consumer prices. Over the last three years (2003-2005) for instance, the average annual rate of the producer price index (PPI) exceeded that of the consumer price index (CPI) – 5.9% against 4.4%!

The only economic adjustment implies that both production of goods and supply of services should look for ways to keep and increase their competitiveness mainly along the line of higher efficiency and better quality of the goods and services offered. This is the logic of economic prosperity – people might feel better well-off in comparison with other countries only when the economy is performing better (and more efficiently!).

Figure 2

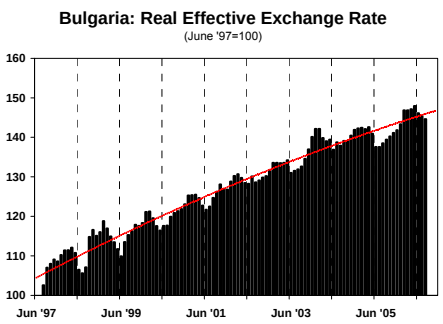
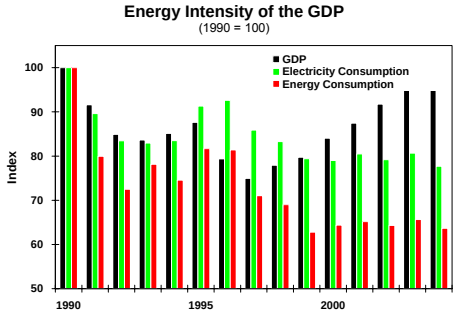


Figure 3



The business has managed to meet the challenges of the steadily appreciating local currency in real terms and consumption reacted to the adjustments in relative prices too. A telling example is given on Figure 3 where one can trace the energy intensity of GDP. In the first half of the 90s the structural reforms went sluggishly and the change in energy intensity was rather imaginary. The situation has changed over the second half of the 90s and onwards. Administrative pressure on energy prices has gradually lessened and thus changed the attitude of economic agents and the people to energy resources. So the positive results have appeared quickly – GDP has recorded significant positive rates of growth at almost the same energy consumption. A certain amount of the overall reduction in energy intensity of GDP can be accounted for by the intrastructural production readjustment which can also be assessed positively as far as a progressive model of production activities is being imposed.

The changed attitude to energy resources made realizing a significant volume of electricity exports possible without an increase in energy generation.

A vivid example of the potential of the real sector to overcome difficulties caused by the really appreciating local currency is the intensive development of exports of goods and services. In 1999 exports of goods amounted to USD 4 billion, whereas in 2005 the latter were three times higher (an average annual rate of growth for the six-year period in current USD of 20%)! There was a similar situation with receipts from tourism (a growth of 2.6 times in nominal USD terms for the last six years!). Such a development would have been illusionary in the recent past. The altered conditions have enabled Bulgarian economy to find ways for a significant increase

in the exports of goods and services despite the suppressing impact of the more expensive local currency.
The consumer has felt the positive economic development in terms of their growing real income, and the favorable influence of the appreciating national currency – in terms of the growing international evaluation of domestic labor. Imported goods and services are getting more accessible for the Bulgarian citizens mainly due to the overtaking growth of domestic revenues in international currency (EURO). The latter has contributed to integrating the country into the European and global structures too.
The findings (in a negative context) about the (relatively) high inflation rates in Bulgaria should be discussed constructively. By means of its higher inflation rates Bulgaria is preparing for its membership in the Euro-area. The general price level is rising and the system of relative prices is changing. All this is taking place in adjusting to the European economic stance. Overtaking inflation rates will continue until the country gets completely ready to join the Euro-area.
Keeping a deficit on the current account of the BoP is a typical feature for the transition counties. Bulgaria's current account has been negative for almost all the period since 1990. The only exception with a positive current account was in 1996-1997 due to the observed dramatic depreciation of the national currency[3]. However, statistics revealed a systematically increasing gap in the trade balance followed by an intensifying negative impact on the current account, which has ever more been attracting the analysts' attention.
The causes for the deficit of the current account are comprehensible but still worrying. The accelerated integration of the country into the European financial and economic structures demands and implies interweaving financial and economic interactions, and the initial effect is always negative on the current account.
One can see the structure of the current account of Bulgaria in the beginning of the twenty first century on Table 1. Traditionally, the trade balance is a negative value, which is offset (partly) by the other aggregate elements of the current account. Services (with tourism as the main positive component) help alleviate the trade deficit. Another positive influence comes from the net current transfers, whose main component are the private current transfers. The latter are formed predominantly from remittances. Lately (in 2006), the share of the income (compensation of the employed) in working out the current account has been reevaluated (statistically). Using an updated methodology, the income in forex of Bulgarian citizens working temporarily abroad – mostly within the three months allowed in the EU countries, was reevaluated for 2004-2005 especially, (to start with). The difference proved to be significant – while the estimate according the old methodology of the earned income stood at about EURO 50-60 million annually, the stricter recording of reality raised this income to over a billion EURO![4]
The sources for the higher deficit in the trade balance lay both in the current account and the financial account. For 2004-2005 for instance, it was calculated

[3] Actually, the Bulgarian situation with the current account in 1996-1997 could be quoted as a case example (though to a certain degree in grotesque forms) of the healing effect of currency depreciation under a deep financial crisis.
[4] The analytical estimates stated the actual remittances through this channel as twice more (Ratha D. – Remittances: A Lifetime for Development. "*Finance and Development*", IMF, December 2005, 42 p.).

that there came about two billion EURO on an average annual each year (nearly a tenth of GDP!), earned by the Bulgarian citizens abroad (official emigrants and visiting workers) – half of the remittances on the one hand and visiting workers on the other. The flow of forex through the Bulgarians working abroad (the EU), and the remittances might be assessed as an indirect material support most of all by the EU. This money contributed to a great degree to forming the trade deficit of three to four billion EURO.

Table 1

Bulgaria 2000-2005: Current Account (m EURO)

	2000	2001	2002	2003	2004	2005
Current Account	-761	-855	-403	-972	-1131	-2531
Trade Balance (goods)	-1280	-1778	-1878	-2426	-2954	-4369
Services	548	331	505	553	693	667
Income	-345	30	404	288	238	247
Current Transfers	316	562	566	613	891	925

Table 2

Bulgaria 2000-2005: Balance of Payment (m EURO)

	2000	2001	2002	2003	2004	2005
Current Account	-761	-855	-403	-972	-1131	-2531
Direct Investment (net)	1100	893	951	1827	2244	1856
Growth of the Gross External Debt	1036	52	-1166	-128	1882	1803
Public External Debt	481	-178	-1738	-913	-619	-1290
Private External Debt	556	231	572	784	2500	3093
Others (net)	-1186	333	1335	-97	-1594	-559
Reserves and Related Items	-188	-425	-717	-630	-1400	-569

The current account was worsening all the time but it was being financed by the inflow of forex through the financial account (Table 2). Over the last two years the new issues of external debt of the private sector have had a decisive contribution to the overall positive balance. In 2005 the net receipts of FDI were not able to cover the deficit on the current account and there was a significant leakage of forex resources linked with the reduction in the external debt of the pubic sector. The shortage of forex resources, for replenishing the international forex reserves of the country including, was covered by the attracted foreign financial resources of the private sector. The point is whether such a situation might induce tension and risks on the macroeconomic level and how much or many these will be.

The transnational movement of capital flows is reflected in the financial account of the BoP. In 2004-2005 for example, the average annual net inflow of forex was about three bullion EURO. The main part of this amount came as foreign investments or as issued external debt of the private sector. The last indicator describes mainly the financial relationships between the local enterprises along the line of FDI, and the respective organizations abroad, on the other hand. In both cases the inflow of capital in the country was meant to develop the production sector, i.e. it involved imports of machines and equipment. The detailed calculations revealed that the predominant part of this in-coming capital left back the country to pay for imported raw materials, machines and equipment within the same current year, i.e. they did not remain in Bulgaria. The BoP registered an almost constant turnover of forex through foreign investments and issued gross external debt. Only a small part of these financial resources stayed in the country in the way of domestic expenditure.

There is one more component of the BoP which brings confusion in assessing the deficit on the current account. It is a question of the item *"Errors and omissions"*. It reflects undistributed transnational forex (net) flows. In 2006 the BNB undertook some consistent measures to redistribute this position by which key financial indicators were altered. There are grounds to believe that a substantial part of these *"Errors and omissions"* are connected with the current account.

The good news from the analysis of the structures in the balance of payments is that the international foreign exchange reserves of the country have been steadily going up. This, finally, demonstrates that the pegged fixed exchange rate has been successful in its disciplining function and is still forcing business to look for opportunities for a gradual and apt adjustment to the evolving environment.

Under the currency board arrangement in operation (a fixed exchange rate) and fully liberalized balance of payments the only efficient macroeconomic instrument to counter the high deficit in the current account (more than 11% in 2005) is the budget policy. Economic theory has manifested (in compliance with the consequences from the Mundell-Fleming model) the performance of the so called impossible trio – under a fixed exchange rate and liberalized balance of payments it is impossible to pursue independent monetary policy. Under the currency board the BNB is, as a matter of fact isolated from the possibility to practice monetary policy (presumably), but the fiscal policy might carry out some elements of the monetary policy. The options touch on the budget deficit management – the sterilization of the input foreign exchange flow presumes taking away all the money supply in circulation (in terms of revenue exceeding expenditure in the government budget), which is to be maintained as the so called fiscal reserve[5] with the BNB.

Bulgaria has managed to keep remarkable budget discipline after the adoption of the CBA (Figure 4). It appears still more important on the background of the economic situation in the EU (Figure 5).

Figure 4

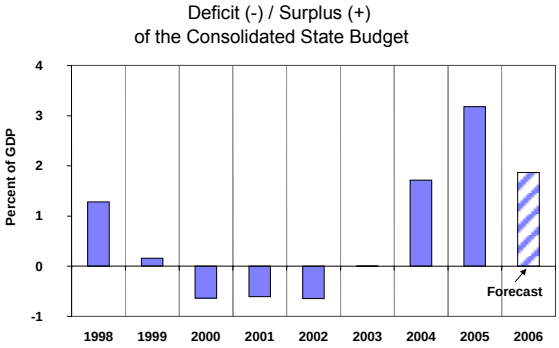
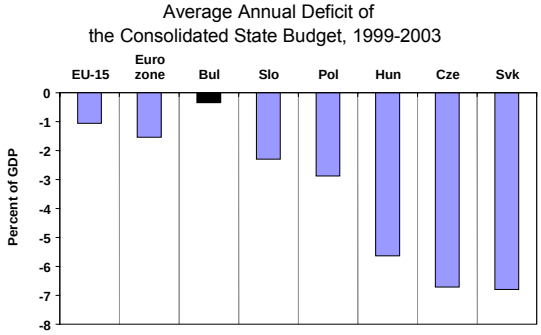


Figure 5



Source: World Economic and Social Survey 2004 (Trends and Policies in the World Economy). UN, DESA, N.Y., 95 p. and my own estimates;

[5] The purpose and design of the *fiscal reserve* is to provide for sufficient financial resources for unimpeded servicing of the external debt. In the near future major debt principals are due for repayment (most of all connected with the issues of global bonds), whereas privatization has almost exhausted its potential. The assessment of the fiscal reserve should be made in perspective, not from the point of view of today's cravings.

The improved possibilities to finance the budget items have enabled a considerable growth in the financial resources available to the government and the fiscal reserve, in particular. Its record high values at the end of 2004 whetted the appetite of politicians to defend the *"national interests"* by means of spending the money accumulated without paying enough attention to its functional composition and purpose. These desires have been cooled down (with the IMF's assistance including).

The possibilities to realise a substantial budget surplus went along with the considerable surplus in the revenue side of the government budget. For 2003-2005 the revenues in the central government budgets were exceded by 12% on an average annual! Along with the natural satisfaction with the higher revenues obtained (planned reserves!), anxiety about the undesired consequences is getting higher. The already traditional model of monthly allocating expenditure from the budget follows a clearly terrace-like structure[6]. The cyclic recurrence thus obtained reflects on the monthly growth of the fiscal reserves too. The year starts from low levels of budget financing which rechannels resources to the fiscal reserve. Gradually, in the course of the year the reallocation of financial resources increases to reach a record high in the last month. A simiilar monthly distribution of expenditure is very convenient for the MF people in charge of the budget but it is highly undesirable in the context of harmonious economic development. There is a striking resemblance to the cyclic monthly development of the real income of a household within the year – in the beginning of the year it is typically marked by low real income which grows to reach a record high level at the end of the year.

There is a direct correlation between the monthly distribution of income observed, and the monthly development of inflation, on the other hand. A similar monthly cyclic recurrence describes the consumer price index too. Such sharp variations tend to create social tension and the specific time structure of income has a reflection on the irrational use of consumer resources available, i.e. they remain underused and ignored as structural elements to raise consumer satisfaction.

The quality and assessment of consumption is not lacking in variations in terms of income distribution over the year – at one and the same level of annual income its relatively more even monthly distribution increases consumer satisfaction, the feeling of social justice respectively. Improving the time structure of income received in the direction of balancing and smoothing the significant monthly variations raises their consumer value, i.e. represents an additional reserve to raise the positive social effect from the improved economic performance.

Although the possibilities of macroeconomic management of change in income are relatively limited (up to the impact on the income of employed in the public sector), the behavior of the government exerts an influence over the principles of management in the private sector. And what is more, it is a model to copy from the private sector. That's why the approach of the macroeconomic elite to planning the monthly structure of expenditure in the government budget, respectively the time

[6] There are two models of budget performance and budget accounting discussed in professional readings – on a *cash basis* and *accrual basis*. What is being practiced in Bulgaria is cash budgeting. The OECD countries are redirecting themselves to accrual budgeting, which is being recommended by budget analysts to the transition economies as well (Diamond J. – Budget System Reform in Emerging Economies. IMF Occasional Paper N 245, 2006, VI). The latter, however, requires purposeful technical and administrative training.

structure of income within the year, is important for the overall process of income regulation.

Recently, in search of incentives for economic growth there were some experiments with various tax structures. The outcomes observed are not simple, as well as those observed from similar experiments in other countries. The idea to leave a greater part of income in the business in order to promote higher economic activities is so tempting that it rouses suspicion. What is evident on the surface is that there is a positive economic performance but also that social stratification and differentiation is intensified. So it is questionable to what extent the positive economic development witnessed is the outcome of the changed structure of taxation and to what extent it follows its logical positive development. A considerable part of the reduction in the tax burden is to the benefit of the more well-off and the latter pretend to prefer to increase their ostentatious consumption and invest in non-productive accumulation (spacious houses). Macroeconomic management has not made any attempt so far (neither shows that it perceives the problem) to restrict non-productive accumulation at the expense of the productive one. The wide-spread policies in the world in this respect are for instance to apply progressive taxation which makes it freezing financial resources in real estate for consumer purposes inefficient.

At the same time key activities connected with the normal performance of the state remain underfinanced. This is the case too with some long-term activities of the state to which it seems to have turned its back. Education and healthcare, that should firmly and constantly be in the focus of government attention, suffer from vague and diluted management decisions, all of them keeping up the marginal status of the employed in these sectors. The status quo thus established creates the prerequisites for the search of unregulated additional income and whenever this turns impossible – it leads to accumulating and mounting social tension.

In the conditions of Bulgarian economy the importance of the institutional factors for social and economic progress outweighs the others. In fact all EU criticism to Bulgaria at the moment is addressed at the unsatisfactory performance of national institutions. Corruption, crime, the quality of the legal system and many other pending problems (economic by nature – in the end) are the outcome of the poor performance of the institutions.

Building working market institutions is a process requiring consistent and purposeful efforts of long standing. Price liberalization, interests and exchange rate arrangement might be altered literally overnight, large-scale privatisation requires a much longer period and preparation, whereas institutional building implies and involves a change in the dominant way of thinking. When building up the necessary institutional environment personal, group and party interests come in collision, and this delays and postpones economic progress. Institutional change affects most intimately and in the long-term both personal and group positions, due to which its realization is a painful and difficult process. It is a question how to think those mechanisms which would provide a long-term economic and social prosperity and attack the reasons for the poor performance of the economy (not the consequences) on this basis.

It is hard to evaluate the quality of institutions in quantity terms. However, there might be individual indirect macroeconomic indicators which provide information about the way economic players and the people assess the complex overall

institutional structure and its impact on the behavior of economic players and the people on the other hand.

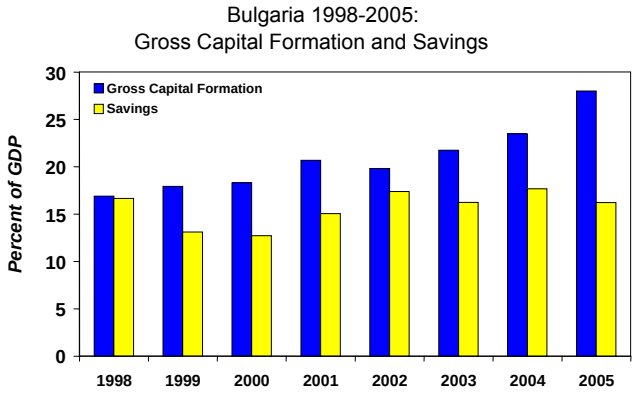
The growth of gross capital formation ratio and savings in Bulgaria after 1998 is shown on nt in order to draw investment.

Figure 6. Economic theory and experience reveal that the levels of these indicators of the order of 15% and less than that are not sufficient for providing a modern technological renovation and acceptable rates of economic growth. This is exactly the level of savings in our country. No doubt, purely psychological motives are not to be ignored here. The readiness of people and economic agents to save is a kind of measure of the confidence in official institutions. If the future seems predictable and institutional behavior of the macroeconomic elite instills confidence, then people will tend to increase and invest their savings. On the contrary, if the institutional set-up of the society does not inspire safety and confidence, then they would rather use whatever has been earned to the full today [7].

The ratio of gross capital formation recorded a clear trend towards growth till about 25% at the end of the period, which should not be overestimated though. During this period there were finalized privatization deals of large state-owned companies and they attracted a lot of foreign investments. Over the last five or six years FDI in Bulgaria accounted for about half of the gross capital formation, i.e. the domestic sources of gross capital formation were at a lower level than the one shown on nt in order to draw investment.

Figure 6. In the near future, however, we have to only rely on the attractiveness of the economy and the improved institutional environment in order to draw investment.

Figure 6



One cannot ignore the massive investment of people in nonproductive capacities and activities (luxurious houses, ostentatious consumption etc.). The flight from

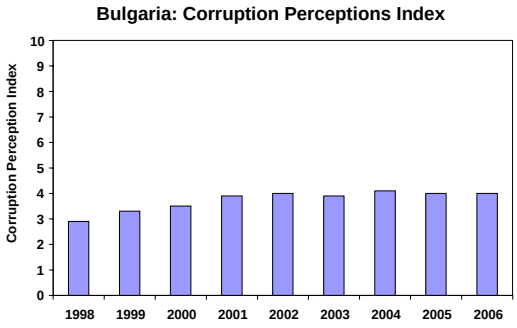
[7] There is a wide-spread simplified belief that the low level of savings is determined by the low level of income. This might be considered a delusion and an example of unadvised superficial conclusion. *First*, the notion of *"low income"* is hard to define in absolute terms, and *second,* there are savings, no matter what the size of income is. In addition, even J.S.Mill proved that *"savings do not reduce consumption*" (Й.Шумпетер – *История на икономическия анализ*. Том 2: 1790-1870. *Изд.* "*Прозорец*", София, 2000, 381 с.).

and reluctance for productive investment might be evaluated as a form of distrust in official state institutions too and as a result of the poor performance of government authorities. Production capacities are much more prone to various ways of actual expropriation than real estate of non-production purposes. Another thing not to be forgotten is the influence of inefficient capital and financial markets.

Corruption is a problem which has been attracting analysts' attention all the time. The unsatisfactory functioning of the institutions gives birth to and nurtures conditions for corruption, which undermines the possibilities for steady economic growth[8]. Figure 7 illustrates the insignificant progress of Bulgaria made in the way of fighting corruption[9]. It should be noted that this progress was made until 2001 and after that it actually kept that level of corruption with even a certain worsening. Figure 8 ranks the CEE countries by levels of corruption and the picture is hardly positive. There cannot be a positive attitude of people and economic agents to macroeconomic institutions in such an environment of "*steady*" corruption. If the latter does not improve significantly, economic outlook cannot be brighter.

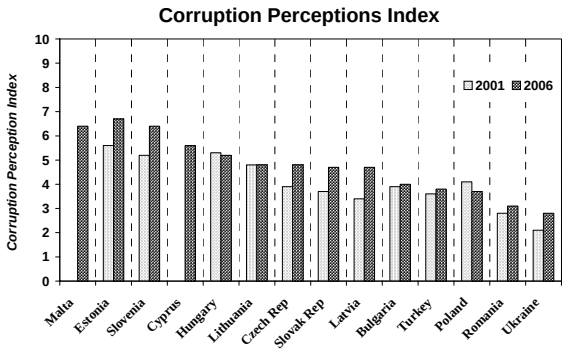
Bulgaria's transition to market economy began in the early 90s of the twentieth century and will most likely finish with the building up of institutional set-up of good quality. There, in the institutions (most generally) all dominant group and personal interests get interwoven. These cannot be changed by a magic wand in a few days (years!?). They demand persevering and consistent efforts aimed at achieving given principles.

Figure 7



Source: Transparency International (Internet);

Figure 8



Source: Transparency International (Internet);

As a rule the managerial elite does not realize the scale of negative outcomes and implications of the poorly performing institutions[10]. Consciously (because of vested

[8] "*The institutional environment, measured by the corruption level, …*" (Tytell I., K.Yudaeva – FDI in Eastern Europe and NIS. "*Beyond Transition*", Jan – Mar 2006, vol. 17, No. 1, WB, 23 p.);

[9] According to the international non-governmental organization *Transparency International* the highest mark is 10 and it corresponds to non-corrupted administration while the lowest one 0 means fully corrupted administration.

[10] Looking after its personal and group interests the managerial elite tends to go lobbying in drawing out the laws and not to think much about the likely (purely economic!) unfavorable consequences for society. This problem is studied in detail in specialist reading. See especially R.Coase who states that "*… the legal system will have a profound effect on the working of the economic system and may in certain respects be said to control it*" (Coase R. – Essays on Economics and Economists. The Uni. of Chicago Press, 1994, 11 p.).

interests) or unconsciously (because of ignorance) some unfinished laws, as well as lenient (or unscrupulous) abidance of legal requirements shape an environment of distrust and insecurity, which eventually erodes the principles and pillars of economy and society. The imperatives of today become predominant naturally and the painful adjustment is put off for better times. However, as experience has shown consistently times and times again, the more this is put off, the stronger the foundations even of short-term goals are undermined.

The most efficient way to leave lasting positive traces in national history is dealing with the painful problems of society. Bulgaria cannot continue to successfully go forward without well performing institutions. The macroeconomic elite (and the political one too) ought to find the strength and the means to build the necessary modern institutional environment. All other "*successes*" will be illusionary and transient.

Modern institutional set-up implies a change in the way of thinking of both the managerial elite and the people. Finally, the accession to the European structures means above all enjoying similar lifestyles, environment assessment, attitude to given elements of social and economic life. What is needed here is to carry out education policies leaving out all kinds of populist elements, targeting these policies at both the people as a whole and the party structures.

*

Macroeconomic forecasts are an important and necessary element in working out macroeconomic policies. This type of forecasts should not be taken to the letter. They do not intend to guess the future and in this was they differ substantially from (say) technological forecasts. They are meant to cultivate a certain flair, vision and understanding of the specific development of economic processes, to assist the researcher to *feel* the economy. The striving is to outline *some bottlenecks*, to predict the emergence of social and economic strains, to make the economic players get ready for some needed management policies to be carried out in the future (transparency).

Such forecasts are made periodically, at regular intervals today (quite often twice a year) by all international financial organizations as well as almost all governments. Deciding on the budget proportions at a national level is necessarily accompanied by an attempt to look further in the mid-term. Forecasts deviate from reality and are constantly to be adjusted. Still they are thought to be of great interest, they are looked for and expected by specialists.

In any case macroeconomic forecasts provide conditional projections – as a consequence from adopting one or another line of macroeconomic policy, or a given exogenous influence (for instance the dynamics of the domestic energy prices, of the major foreign exchange rates etc.), i.e. they study problems of the type "*what – if*". Conditionality is expressed too in the change in macroeconomic parameters at the moment when a given macroeconomic decision is being applied. The economy alters its configuration and the reaction of economic agents creates a new reality. The latter is known in economic theory as "*The Lucas Critique*" and in particular it says that "*…economic behavior will change in response to a policy change*"[11].

[11] Quoted from: S.Pressman – Fifty Major Economists. "*Routledge*", 1999, 195 p.

The specialist theory was aware of the specific features of macroeconomic forecasting as early as the 80s of the last century, although there are quite often some expectations and even requirements for working out unconditional macroeconomic forecasts (much more as inertia coming from the widespread meaning of the word *forecast*). Speaking about the experience of Norway of the second half of the XXth century in the field of macroeconomic forecasting L. Johansen explicitly pointed out that "*…the goal of such projections* (macroeconomic ones – note G.M..) *is to study the implications of one or another hypothesis, and not to describe the most porbabale trends of development*". The author paid special attention to the particularities of social systems where any forecasts might exert some influence on the people's and economic agents' expectations and bring about a change in the development of the specific processes. So, "*…the forecast might help alter the dynamics of the forecasted values themselves*" [12].

The very nature of macroeconomic forecasts defines them as a marginal estimate of specific management policies. There is no final objective in terms of a state towards which the society is striving, i.e. there are no ultimately desired parameters for macroeconomic theory to strive for in order to attain a given economic trajectory (the specific macroeconomic criterion for optimum performance is absent). If we follow F. Hayek we have to agree that "*life has no other goal but itself*". Each individual sets out their own goals which in a strange and spontaneous way combine at the social level[13]. The forecast is based on observed values and development and projects the impact of given management policies. This is what the marginal economic philosophy means anyway – an assessment of the new (adjusted) elements of economic policy, i.e. the value added of the specific social and economic policies. If it is a question of any optimization at this level at all, then this is maximizing the marginal effect of given managerial policies and this is in a way what the economist-researcher has assessed. The appearance of relationships which macroeconomic management viewed as unwelcoming should be avoided, or vice versa – one should think over very well what kind of economic policies would be able to generate acceptable social and economic outcomes. Thus projections into the future lead to the better course of action. Such a view of macroeconomic forecasting is getting it close to what H. Simon had in mind: "*Instead of always seeking the optimal, we get the best information we can for making the most practical choice, and then we stick with it*"[14].

The forecasts'convergence with reality is an indicator of the extent to which our own knowledge of economic interactions goes, as well as how powerful the probable domestic or outside shock effects might be. The clear and hidden application of some fundamental principles about the relationships and dependencies in the economy underlie any quantitative projections. M. Friedman, for instance, went further in claiming, that "*…there is no importance whatever if the*

[12] Л.Йохансен – Очерки макроэкономического планирования. Том 1, Изд."*Прогресс*", М., 1982, 153-154 с.

[13] F. Hayek – The Fatal Conceit: The Errors of Socialism. "*Отворено общество*", София, 1997, 179 с. This can act as a constructive element too of the so called *spontaneous row*, that F. Hayek is keen on keeping in an undeliberate and unplanned way (see the interpretation of S. Koeva – (The market as a spontaneous row. F.Hayek's contribution) Пазарът като спонтанен ред. Приносът на Ф.Хайек. Изд. "*Стено*", Варна, 2002))

[14] Quoted from: M.McCarty – The Nobel Laureates. McGraw-Hill, 2000, 33 p.

assumptions underlying the economy are realistic or not". What matter is "*… if these assumptions bring about fruitful suggestions which might be checked empirically and thus prove if they are valid or not*". How true and adequate a theory is, is proved by the degree to which it is able to predict the future[15]. The forecasts and their comparison with reality turn into an instrument for assessing the adequacy of the theoretical conceptions at the input. The more so that the in-built initial prerequisites all but too often overlap with the consequences from adopting them[16].

In this case, as well as in many others in economic (and in statistical) research, negative statements seem to be more forceful and sound much more assertive than the positive ones. This is what M. Friedman pointed out by emphasizing that facts and reality can never prove (M.F.) a given economic assumption or theory. What they can do is only refute it[17].

For the sake of thoroughness one should admit that there are alternative views in economic theory. The American economist W. Michel of the early XXth century is one of the representatives of the anti-theoretical thinking. He is critical of working out complex theoretical economic models to explain economic reality and suggests focusing on direct observation instead, whereby the latter "*…is not based on preconceived opinions but tends in particular to thoroughly measure the facts observed*". This stance has boosted the development of the so called "descriptive economic statistics"[18].

Due to the above considerations using sophisticated mathematical apparatus will not be able to improve forecasts. Along with all the other difficulties this apparatus will only contribute to render the process of finding out the final outcome much more vague and bring about some mysticism (the computer says so?!). Actually, whatever the methodology, the specific forecast will always be personal and not impersonal (a computer one). Responsibility respectively (however conditional) will be personal, too. Macroeconomic forecasts always bear the print of the subjective factor, they are the product of man although the qualities of the methodological apparatus are not to be neglected at all. By applying one and the same methods and apparatus, various specialists can construe differing forecasts. These differences will reflect the theoretical concepts and hypotheses set in the forecasts, as well as the degree of specialist training of the research team.

What is advisable in working out the complex methodological tools is to resort to relatively compact behavioral functions and at the same give up any claims for maximum scope in terms of formal functional dependencies. The technical work in the number of options should not be very time-intensive by enabling the researchers to focus their attention exceptionally on how adequate, admissible and

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[15] Quoted from : Р.Гилпин – Глобална политикономия. Изд. "*Д.Яков*", С., 2003, 82-83 с.; Т.Бухолц – Живи идеи от мъртви икономисти. Изд. "*Христо Ботев*", С., 1993, 272 с.

[16] P.Samuelson said that "*…the distinction between assumptions and predictions is never very clear; what counts as an assumption and what counts as the consequence of some assumption is quite arbitrary*" (S.Pressman – Fifty …, already quoted., p.163). Analysing the assumptions underlying the production functions R.Dorfman, P.Samuelson and R.Solow pointed out that "*…perhaps economists would not have gotten into the habit of making this assumption so glibly if they had realized what, and how much, they were assuming*" (R.Dorfman, P.Samuelson, R.Solow – Linear Programming and Economic Analysis. Dover Publications, Inc., 1958, 203 p.).

[17] M.Friedman – Essays in Positive Economics. The Uni. of Chicago Press, 1953, 9 p.

[18] Quoted from: В.Леонтиев – Есета по икономика. Изд. "*Христо Ботев*", София, 67 с.

reasonable the outcomes are, i.e. on the most important features of the projections. The methodological apparatus is supposed to be able to generate (copy) various possible and probable combinations of macroeconomic parameters, and the final estimate of how reasonable the various options, and how probable the emergence of the potential social and economic strains, should lie on the economist – researcher.

Table 3

Bulgaria: Main Economic Indicators

	2002	2003	2004	2005	*2006*	*2007*	*2008*	*2009*
	Real Data				*Forecast*			
Aggregate Demand (current m BGN)								
Individual Consumption	24823	26846	29325	33067	*35934*	*38562*	*41156*	*43912*
Collective Consumption	3247	3469	3898	4097	*4217*	*4552*	*4882*	*5235*
Gross Capital Formation	5909	6694	7969	9971	*12284*	*13613*	*15536*	*17959*
Export	16706	18500	22192	25506	*31419*	*33954*	*36384*	*38958*
Import	19065	21779	26115	32449	*40799*	*37842*	*39264*	*40211*
Gross Domestic Product	32335	34547	38275	41948	*45991*	*50577*	*55172*	*60166*
Aggregate Demand (2001 m BGN)								
Individual Consumption	23791	25480	26729	28707	*29798*	*30930*	*32106*	*33326*
Collective Consumption	2978	3067	3272	3344	*3497*	*3651*	*3809*	*3973*
Gross Capital Formation	5881	6699	7603	9048	*10093*	*11226*	*12455*	*13820*
Export	16949	18305	20685	22174	*26010*	*27311*	*28676*	*30110*
Import	19333	22290	25433	29147	*32787*	*32802*	*33946*	*33769*
Gross Domestic Product	31165	32505	34358	36247	*38348*	*40497*	*42699*	*45025*
GDP Growth Rate (%)	4.9	4.3	5.7	5.5	*5.8*	*5.6*	*5.4*	*5.4*
Balance of Payments (current m USD)								
- - Export --								
SITC 0 - 1	605	626	837	986	*1070*	*1132*	*1198*	*1267*
SITC 2 + 4	357	462	620	740	*825*	*884*	*961*	*1029*
SITC 3	559	623	1004	1796	*1973*	*2126*	*2277*	*2455*
SITC 5 - 9	4171	5830	7386	8218	*9025*	*9665*	*10352*	*11087*
All goods	5692	7541	9848	11740	*12892*	*13808*	*14788*	*15838*
- - Import - -								
SITC 0 - 1	374	484	698	856	*918*	*995*	*1050*	*1128*
SITC 2 + 4	370	560	822	1157	*1348*	*1508*	*1666*	*1846*
SITC 3	1425	1708	2223	2667	*2740*	*2635*	*2489*	*2298*
SITC 5 - 9	5117	7307	9747	12459	*14012*	*15152*	*16211*	*17403*
All goods	7287	10059	13491	17139	*19018*	*20289*	*21417*	*22676*
Trade Balance (E-I)	-1595	-2519	-3643	-5399	*-6126*	*-6482*	*-6629*	*-6838*
Key Economic Indicators								
Exchange Rate, Annual (BGN/USD)	2.08	1.73	1.58	1.57	*1.56*	*1.55*	*1.52*	*1.49*
Exchange Rate, Annual (BGN/EUR)	1.96	1.96	1.96	1.96	*1.96*	*1.96*	*1.96*	*1.96*
CPI, Annual Average (%)	5.8	2.3	6.1	5.0	*7.1*	*5.1*	*4.3*	*4.2*
GDP Deflator, Annual (%)	3.8	2.4	4.8	3.9	*3.6*	*4.1*	*3.5*	*3.4*
Labor Force (Th.)	3315	3283	3250	3250	*3255*	*3260*	*3260*	*3260*
Employment, Annual Average (Th.)	2979	3021	2996	3047	*3086*	*3105*	*3118*	*3150*
Registered Unemployment (Th. As of 31.12.)	603	501	451	383	*327*	*323*	*298*	*276*
Unemployment Rate (%)	16.3	13.5	12.2	10.7	*8.7*	*8.3*	*7.9*	*7.0*
Labor Productivity (Th. 2001 BGN)	10.5	10.8	11.5	11.9	*12.4*	*13.0*	*13.7*	*14.3*
Annual Average Wage (current BGN)	3720	3957	4300	4572	*5116*	*5646*	*6180*	*6724*
Money Supply M1 (current m BGN)	6696	8030	10298	11652	*12775*	*14049*	*15325*	*16713*
Money Supply M2 (current m BGN)	13854	16465	20302	24675	*27806*	*31610*	*34482*	*37604*
Money Supply M3 (current m BGN)	13857	16566	20394	24925	*28087*	*31930*	*35186*	*38371*

The simulation model used by the author of this paper to make the macroeconomic forecasts for Bulgaria in the mid-term within the framework of the LINK project[19], follows the principles set out above. On Table 3 one can track the changes in the key macroeconomic indicators for Bulgaria, arrived at by means of the simulation model.

The mid-term economic development of Bulgaria is likely to be favorable. There are all the prerequisites for the country to manage to keep up satisfactory rates of growth, which will enable it to gradually integrate into the European structures.

Of all the features of macroeconomic policies it is worth outlining at least three of them:

First, *Bulgaria is firmly set to continue operating the currency board arrangement with the exchange rate pegged to the EURO. The official paper entitled Strategy of the Bulgarian National Bank declares its commitment to act within the current currency board framework until its full Euro area and Eurosystem membership*". And moreover: "*The BNB supports the view of Bulgaria's joining the ERM II immediately after EU accession, and commits to maintain unilaterally the currency board until euro area accession at the fixed exchange rate of 1.95583 levs per one euro. The BNB will conform to the framework set by the EC and the ECB, which precludes unilateral euroization of an acceding country*" [20].

Second, Bulgaria will go on pursuing strict and conservative fiscal and budget policies. This might cause some tension in the National Assembly, as far as politicians tend to be ready to spend any money accumulated. In the spring of 2007 the seventh and last stand-by agreement (a precautionary one) with the IMF expires and it is likely to be the very last one. Since agreements with the IMF always specify the need for tight and conservative fiscal and budget policies, then during the preparation of the government budget there might be some voices claiming to have the budget restrictions alleviated. This government's term of office expires in 2009 and it is quite likely to have some claims demobilising the budget but it is hoped that the the IMF will successfully pass on the restrictive torch to the EC.

Third, the issue with inflation and keeping to adequate macroeconomic policies acquires some new dimensions with a view to Bulgaria's accession to the EU. The financial framework for 2007-2013 envisages that Bulgaria will obtain from the EU funds EUR6 billion for regional policies, EUR5 billion for the agrarian areas and agriculture and EUR500 billion for other policies[21]. The total inflow of financial resources along the lines of cooperation with the EU for this period is estimated at EUR11.5 billion. This money supply accounts for about 6-7% of GDP, or 15-16% of

[19] For more detail on project LINK see http://www.chass.utoronto.ca/link/meeting200610.htm

[20] Strategy for Bulgarian National Bank Development between 2004 and 2009. Sofia, September 2004, 7 p. The paper can be found on the Internet address: http://www.bnb.bg/bnb/home.nsf/fsWebIndex?OpenFrameset .
Bulgaria adopted the currency board arrangement on the recommendation of the IMF in the mid 1997, following a deep financial crisis. At that time the Bulgarian lev was pegged to the DEM as 1000 BGL/DEM. The BNB's Law of 1997 stated that upon the introduction of the EUR the Bulgarian lev will switch its pegging to the at the same ratio/proprtion as to the DEM. At he end of 1998 the relationship between the DEM and the EUR was set at 1.95583 DEM/EUR and the Bulgarian lev pegged to the EUR as follows 1955.83 BGL/EUR. In the mid 1999 Bulgaria denominated its own currency whereby 1000 old Bulgarian levs were replaced by one denominated lev, so the exchange rate was fixed at 1.95583 BGN/EUR.

[21] As the Minister of Finance Pl. Oresharski said (*The Standard newspaper*, 11.05.2006, 11 p.).

revenues in the government budget and a fifth to a quarter of the money in circulation[22]. Macroeconomic management will be faced with a serious challenge, linked with the rational management of a substantially increasing money supply. Anyway there will be a tangible pressure on the price level which should be alleviated and neutralized in a suitable way. It has to do with both the BNB policies and the fiscal ones. Most likely, however, the administration will not be able to absorb the resources provided to a degree high enough, which, everything being equal, will mean again a delay in the process of integration into the European structures.

*

Following a painful transition from a centrally planned to market economy, which was met with controversial estimates al the way through, Bulgaria now is set to record steady and sustainable social and economic progress. Over more than ten years in a row the country has managed to maintain relatively good and acceptable rates of economic growth. The key structural reforms have already irreversibly been carried out, with the private sector holding solid positions and economic future seems predictable. A satisfactory trend towards falling unemployment has also become noticeable.

Despite the ebbs and flows in the country's relationships with the international financial organizations it is no doubt necessary to emphasize unconditionally their overall positive impact. As a rule the domestic economic elite has been jealous of the requirements of the international financial institutions, but it is true, that it was not easy at all to carry out market reforms on their own, independently of them, and that more than once it was tempted to skid because of inconsistency or political advantage. The presence of the international financial institutions has even had, in psychological terms, a favorable impact on macroeconomic management as far as it enabled it to provide justifications and find an excuse for the painful for the people market reforms.

The major macroeconomic institutions – the Ministry of Finance and the BNB have become more stable and cautious in adopting policies of discretionary nature. However, populist calls and promises tend to crop up from time to time and people do not always react adequately. The fatigue from the transition and nostalgia for the secured past are easy to be exploited as well as put to use to serve personal and group political interests and such a behavior might prove disastrous for the country's future.

Bulgaria's accession to the EU and integration into the European economic and all other structures is looked for with satisfaction by the people. The issue now seems to be to rein in the excessive expectations for fast and unpainful social and economic progress. Here too, the political elite is at stake, since political rhetoric might exert a significant influence on the people and their expectations and these are often not used in disinterested way. In any case Bulgaria's future is inextricably bound up with that of the EU and the faster the country integrates into the European structures, the better.

[22] GDP for 2005 was BGN 42 billion, while the figure quoted corresponds to an average annual rate of growth of about 5 percent. Money in circulation at the end of 2005 in Bulgaria was estimated at about BGN 6 billion, with a growth of about a fifth an average annual for 2001-2005. In the next decade this rate of growth will most likely fall to about 15%, so that the net planned inflow of financial resources from the EU funds for 2007-2013 will account for nearly a fifth to a quarter of the money in circulation.

Икономически изследвания
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Tamás Szemlér[1]

MID-TERM ECONOMIC PROGRAMMES AND THE USE OF EU FUNDS IN HUNGARY

The paper provides an overview of the three main mid-term economic programmes of Hungary: the National Strategic Reference Framework (NSRF), designed for identifying the main development objectives and for the efficient use of (EU and domestic) financial resources, the Convergence Programme (CP), the fulfilment of which is crucial for getting closer to the introduction of the euro, and the National (Lisbon) Reform Programme (NRP) having macroeconomic, microeconomic and employment objectives to reach in order to modernise the economy and the society. The paper shows the most important linkages, contradictions and overlaps between the three programmes, stressing the need for permanent coordination. Ibudget corrections are in the foreground right now, but is crucial that they should be followed by real reforms: the CP foresees such reforms, and some of them are already designed and will be introduced as soon as in 2007. In the design of such reforms, the NSRF and the NRP have a very important role. Hungary should not handle any of the above programmes as just « homeworks », which can be solved by the creation of a certain amount of official papers, because the implementation of these programmes is of crucial importance for the economic and social development of Hungary in the coming years.
JEL: E65

Introduction

„Programming" is one of the key words of European integration. In a general sense, it means that actions should not be initiated *ad hoc*, but as part of a process. The notion of programming is most well-known in the field of structural operations, where it is one of the fundamental principles in the European Communities (EC)/European Union (EU) since 1988. However, as empirical evidence shows, programming is present in practically any field of European integration: long-term programmes (plans) are more or less regularly elaborated (on regional, national and/or supra-national level) in order to promote development in the field in question.

This is also true for the case of Hungary. The paper will provide an overview of the three main mid-term economic programmes of Hungary: the National Strategic Reference Framework (NSRF), designed for identifying the main development objectives and for the efficient use of (EU and domestic) financial resources, the Convergence Programme (CP), the fulfilment of which is crucial for getting closer to the introduction of the euro, and the National (Lisbon) Reform Programme (NRP)

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having macroeconomic, microeconomic and employment objectives to reach in order to modernise the economy and the society.

Three Main Issues – Three Mid-Term Programmes

Hungarian economic policy objectives are in many aspects closely linked to the conditions the country has to fulfil in order to comply with EU requirements. These links can be best summarised in the case of three issues:

- The main overall economic objective of the country is to catch up to the EU average development level. EU funds (the Structural Funds and the Cohesion Fund) play a very important role in this process, especially with regard to the increase of funds available from 2007 (on average, between 2007–2013, yearly ca. 3,2 bn euro will be available from these funds for Hungary; this is roughly 3 times the yearly average in the period 2004–2006).
- Hungary is committed to replace its national currency by the euro as soon as the country is ready for that. To arrive at that point, Hungary has to make efforts in order to fulfil the Maastricht criteria.
- Hungary, as all the member states of the EU, is part of the Lisbon process. The years 2005–2008 constitute the first mid-term period for introducing measures in order to realise progress in the fields of macroeconomic and microeconomic performance, as well as of employment.

The above three objectives overlap considerably in time; regarding the contents, there are overlaps (even synergies) which can help the realisation of the objectives, but in some aspects, these objectives – at least on the short run – also contradict each other. Most contradictions concern financing, and it is the task of the elaborated mid-term programmes coordinate the policies in a way that enables to make ends meet. The three programmes mentioned above are the following:

- National development objectives, priorities and the use of EU funds are integrated in the National Strategic Reference Framework. Due to its nature, this programme has a solid financial background for the period 2007–2013.[2] The NSRF (also called New Hungary Development Plan in Hungary) contains a detailed evaluation of the situation, the description of development objectives, priorities and measures, as well as an overall plan for financing these measures.
- The way towards fulfilling the Maastricht criteria is laid down in the Convergence Programme. Due to the fact that Hungary did not reach the targets laid down in its CP, a new version of it was prepared by September 2006. This new version established a new path of economic development the next years, but did not set any official target date (being earlier 2008, then 2010) for the introduction of the euro.
- The National (Lisbon) Reform Programme[3] outlines the main tasks related to the EU's Lisbon strategy in Hungary in the period 2005–2008. This programme – similarly to the NSRF – also contains an evaluation of the present situation and mid-term prospects of the economy, and proposes

[2] The first NSRF (generally referred to in Hungary as National Development Plan) was prepared for the period 2004–2006.

[3] In Hungarian, the programme is generally referred to as Lisbon Action Programme (Lisszaboni Akcióprogram).

measures in the fields already mentioned. The big difference from the NSRF is that the role of EU financing is minimal in Lisbon-related actions.

Overlaps between the programmes are relatively easy to identify. All the three programmes have to take into account the actual situation and the mid-term prospects of the economy. No wonder that the evaluation parts of the programmes are very similar to each other; in part, they have been produced by the same institutions and the same people. This, of course, helps the programmes to be coherent, and reduces the risks of containing contradictory evaluations and expectations.

However, there are important differences between the programmes. The CP is very different from the other two programmes: its objectives are very clear, and the measures it requires, generally reduce the room of manoeuvre of both other programmes (especially of the NRP, which has to be realised mainly from domestic financial resources, but also making co-financing potentially more difficult in the case of the NSRF). We have to note, anyway, that even the CP can have effects which strengthen both other programmes: e.g. if the public sector reform is successfully managed, it can also help to make the use of EU funds more efficient as well as enabling a change of the business environment pointing to the direction set in Lisbon.

This is, of course, easy to say, and much more difficult to reach in practice. As Hungary is still relatively at the beginning of all three programmes (in the case of the CP, the 2006 versions mean practically a new beginning), we cannot speak about clear results by now. Instead, in the following sections, we will present the main challenges regarding the following
mid-term period from the point of view of the three programmes.

Macroeconomic Background and the Convergence Programme

According to the earlier projections (from the years 2004–2005), real GDP growth in Hungary was expected to remain around or above 4% in the next years. However, in the year 2006, the CP needed to be considerably modified, and the actually foreseen growth path of the Hungarian economy shows considerable differences vis-à-vis earlier expectations, with special regard to the years 2007–2008. In these two years, real GDP growth is expected to fall well under 3%, to return to higher growth again from 2009 (see Table 1 for the main economic indicators).

As a substantial component of GDP growth, domestic use projections follow a similar path, although the values are at a lower level. As a consequence, the decline in the values leads to quasi-stagnation in the years 2007–2008 (and, in the case of private consumption, a drop in the year 2007 is foreseen). Return to around 3% growth is expected only by 2010–2011.

Exports are still expected to increase more than twice as fast as GDP, thus they remain a driving force of growth. The optimism of the projections in this respect can be justified by the experiences of the previous years (Hungarian exports grew consistently 3 to 4 percentage points faster than external demand, even in the case of recession on the main export markets).

The estimated yearly growth rate of investments is quite modest (but still clearly positive, and faster than that of real GDP) for the “tough” years 2007–2008, but

expected to increase to a level around 7% for 2009. An important underlying factor of this relative dynamism is the continuously increasing presence of foreign capital; the attractiveness of the country for foreign investors has to be further increased. Firms with foreign capital play a very important role in the export performance of Hungary, as well.

Table 1

Stabilisation and equilibrium – main economic indicators, outlook 2007–2011

	2007	2008	2009	2010	2011
changes vis-à-vis the previous year (%)					
GDP	2.2	2.6	4.1	4.3	ca. 4.5
Domestic consumption	0.3	0.7	3.3	3.7	ca. 4
of which:					
Private consumption	-0.8	0.0	1.8	2.7	ca. 3
Gross fixed capital formation	2.4	4.0	7.5	6.8	6–8
External trade					
Export (goods and services)	10.6	9.7	9.4	9.3	8–10
Import (goods and services)	8.1	7.5	8.6	8.9	8–10
Real income per capita	-1.3	0.4	2.4	3.1	ca. 3.5
Employment	0.0	0.3	0.7	0.7	0.7–1
Consumer prices	6.2	3.3	3.0	2.8	2.5–3
in % of GDP					
Current account deficit	5.0	3.3	2.3	1.5	ca. 1
Net borrowing vis-à-vis the rest of the world	3.6	1.7	0.1	-0.6	ca. -1.5
Budget deficit	-6.8	-4.3	-3.2	-2.7	-2.2
Primary balance	-2.4	0.0	0.9	1.1	ca. 1.5
Expenditures without EU-transfers	43.7	40.5	39.7	38.5	ca. 38
Tax and contribution revenues	38.1	37,8	37.3	37.0	36.5–37
Gross public debt	70.1	71.3	69.3	67.5	65–66

Source: Government of the Republic of Hungary (2006b): Convergence Programme of Hungary 2006–2010 (December 2006), p. 5.

Changes in the CP also affect expectations concerning employment and unemployment figures (see Table 2 for details). In 2007, the employment level is estimated to stagnate, from 2008, a slow increase in the number of employees is expected. The unemployment rate is expected to slightly increase, then decline again; and while the decrease foreseen from 2008 is expected to be relatively small, it is calculated for slightly increasing activity rates, thus the real improvement can be better, if the figures come true.

Table 2

Employment and growth in Hungary (change in %)

	2005	2006	2007	2008	2009	2010	2011
Number of employees	0.0	0.6	0.0	0.3	0.7	0.7	0.7–1
Increase of productivity	4.1	3.4	2.2	2.2	3.5	3.6	ca. 3.5
Unemployment rate, %	7.2	7.4	7.5	7.4	7.3	7.2	7–7.2
Activity rate, %	61.4	61.9	62.0	62.3	62.8	63.4	ca. 64
GDP	4.2	4.0	2.2	2.6	4.2	4.3	ca. 4.5

Source: Government of the Republic of Hungary (2006b): Convergence Programme of Hungary 2006–2010 (December 2006), p. 12.

Indicators concerning stability have been problematic for Hungary for a long time. In the case of price stability, the tendency of improvement was expected to continue, but the changes in 2006–2007 (increase of VAT for a broad set of products and services, gradual adjustment of highly subsidised energy prices to the world price level) lead to an increase of the CPI in these years (see Table 3 for details). However, the consistent stability-oriented policy is expected to help to get over this temporary increase, and from 2008, the figures foreseen return gradually onto the earlier development path.

Table 3

Inflation (%)

	2005	2006	2007	2008	2009	2010	2011
CPI, annual average	3.6	3.9	6.2	3.3	3.0	2.8	2.5–3

Source: Government of the Republic of Hungary (2006b): Convergence Programme of Hungary 2006–2010 (December 2006), p. 15.

As it can be seen from the data in Table 4, due to the sharp divergence of the public deficit from the original plans, the 2004 version of the CP had to be modified in December 2005. The increase in general government net lending also led to a divergence in the gross debt figures. This has already meant considerable modifications, but the really big (and shocking) changes came with the September 2006 version. The actual (December 2006) version of the CP contains only some relatively minor (but positive) differences in expectations compared with the previous one. The differences between the different versions of the CP is shown until 2008 in Table 4, but, of course, it has consequences for the years after, as well (the expected values of the actual (December 2006) version of the CP are given in Table 1).

Table 4

General government net lending and general government gross debt (% of GDP) figures in the Convergence Programme

	2004	**2005**	**2006**	**2007**	**2008**
General government net lending					
CP 2004	4.5	3.8	3.1	2.4	1.8
CP 2005	5.4	6.1	4.7	3.3	1.9
CP 2006/09		7.5	10.1	6.8	4.3
CP 2006/12 (actual)		7.8	10.1	6.8	4.3
General government gross debt					
CP 2004	57.3	55.3	53.0	50.6	48.3
CP 2005	57.2	57.7	58.4	57.9	56.2
CP 2006/9		62.3	68.5	71.3	72.3
CP 2006/12 (actual)		61.7	67.5	70.1	71.3

Source: Government of the Republic of Hungary (2004): Convergence Programme of Hungary 2005–2008, Government of the Republic of Hungary (2005): Updated Convergence Programme of Hungary 2005–2008, Government of the Republic of Hungary (2006a): Convergence Programme of Hungary 2005–2009 (September 2006), Government of the Republic of Hungary (2006b): Convergence Programme of Hungary 2006–2010 (December 2006).

The National Strategic Reference Framework

The period 2007–2013 is generally considered in Hungary as *the* period, which is most decisive for the success of the economic catching-up process of the country. Of course, no one can realistically expect Hungary to reach the living standards of the developed Western European countries, and not even the EU average GDP per capita level by the end of this period. Still, the size of the external finances available fro the EU Structural Funds and the Cohesion Fund means that development opportunities in this period will be of a higher order of magnitude than any time in the last decades. The total amount of potential financing from the above funds for the period is close to € 23 bn (on 2004 prices); for one year, it means more than three times the support level of the average of the period 2004–2006.

The new possibilities required new approaches. While in the period 2004–2006, operational programmes (OPs) have been centrally organised (four branch-specific OPs and one « regional » OP for all the regions of the country), the structure of the OPs is different in the period 2007–2013. From the 15 Ops, there are 7 branch-specific ones and 7 regional ones, and there is an OP designed to support the implementation of the NSRF. The regional OPs have been prepared by the regions themselves, in this respect, they represent a decentralised approach. On the other hand, the Management Authority of every OP (thus, also in the case of the regional OPs) is an administrative unit of the National Development Agency; in this sense, decentralisation still has important limits.

The amounts planned for the OPs for the period 2007–2013 are shown (on current prices) in Table 5. The OP with the biggest amount of EU funding is – not surprisingly – the Transport OP, with more than 50% of the total amount planned for the NSRF, while the second one is the Environment and Energy OP (with ca. 1/3 share). Both programmes enjoy support from the European Regional Development Fund as well as from the Cohesion Fund, and both are of crucial importance for the catching-up process and the long-term competitiveness of the Hungarian economy. The room left for the other branch-specific OPs as well as for the regional ones is relatively limited, but there is still much more possibility for progress than in the previous period, as the amounts show a considerable increase.

As it has been mentioned before, in principle, there is a potential risk of contradiction between the CP and the NSRF: co-financing of the EU support has to be guaranteed. The risk seems to be only theoretical, as the latest version of the CP explicitly guarantees the necessary financial resources for this purpose. There is another kind of close connection between the CP and the NSRF, as the objectives some of the OPs (State Reform OP, Social Renewal OP, Electronic Public Administration OP) are important elements of the reforms foreseen in the CP.

Table 5

Indicative financial allocation plan of the operational programmes, 2007–2013

Financial table of the NHDP per operational programmes, 2007-2013

Convergence objective — EUR, current prices, commitments

Operational programme	Source	Total	2007	2008	2009	2010	2011	2012	2013
Economic Development OP	ERDF	2 437 402 984	342 709 556	332 657 923	316 973 790	328 400 461	372 828 144	361 364 632	382 468 478
Transport OP	CF+ERDF	6 289 779 395	364 188 005	597 138 725	859 352 936	1 032 699 259	1 094 686 465	1 139 959 612	1 201 754 393
	CF	5 185 389 729	208 905 971	446 411 096	715 731 803	883 900 691	925 757 670	976 224 945	1 028 457 553
	ERDF	1 104 389 666	155 282 034	150 727 629	143 621 133	148 798 568	168 928 795	163 734 667	173 296 840
Electronic Public Administration OP	ERDF	357 306 637	65 290 039	58 624 473	51 079 216	46 420 553	45 320 058	44 046 127	46 526 171
Central Hungary Region		76 422 554	25 796 504	20 289 280	14 551 447	8 575 985	2 355 685	2 402 798	2 450 855
Social Infrastructure OP	ERDF	1 948 922 941	274 027 118	265 989 934	253 449 059	262 585 709	298 109 639	288 943 529	305 817 953
Environment and Energy OP	CF+ERDF	3 852 957 624	194 954 364	351 657 916	528 656 684	642 625 891	677 749 187	709 531 437	747 782 145
	CF	3 456 926 488	139 270 648	297 607 397	477 154 536	589 267 128	617 171 780	650 816 630	685 638 369
	ERDF	396 031 136	55 683 716	54 050 519	51 502 148	53 358 763	60 577 407	58 714 807	62 143 776
West-Transdanubia OP	ERDF	463 752 893	65 205 692	63 293 216	60 309 072	62 483 170	70 936 210	68 755 103	72 770 430
Central Transdanubia OP	ERDF	507 919 836	71 415 758	69 321 142	66 052 793	68 433 948	77 692 040	75 303 208	79 700 947
South-Transdanubia OP	ERDF	705 136 988	99 145 354	96 237 434	91 700 038	95 005 754	107 858 617	104 542 240	110 647 551
South-Great Plain OP	ERDF	748 714 608	105 272 560	102 184 927	97 367 119	100 877 132	114 524 303	111 002 973	117 485 594
North-Great Plain OP	ERDF	975 070 186	137 099 147	133 078 045	126 803 690	131 374 869	149 147 929	144 562 012	153 004 494
North-Hungary OP	ERDF	903 723 589	127 067 503	123 340 627	117 525 372	121 762 074	138 234 666	133 984 304	141 809 043
Implementation OP	ERDF	343 095 254	48 240 699	46 825 804	44 618 064	46 226 512	52 480 270	50 866 636	53 837 269
Social Renewal OP	ESF	3 361 711 436	552 273 738	510 950 617	461 573 422	443 835 530	464 845 952	451 185 375	477 046 802
Central Hungary Region		404 182 559	136 432 199	107 305 663	76 959 493	45 356 554	12 458 714	12 707 889	12 962 047
State Reform OP	ESF	145 432 031	29 049 043	25 482 400	21 548 824	18 611 340	16 911 746	16 460 064	17 368 614
Central Hungary Region		43 670 032	14 740 860	11 593 874	8 315 113	4 900 563	1 346 106	1 373 028	1 400 488
National Performance Reserve		373 419 835	0	0	0	0	0	184 861 304	188 558 531
NSRF in total		22 890 071 092	2 298 969 013	2 637 594 366	2 997 184 026	3 342 509 100	3 665 164 721	3 868 884 841	4 079 765 025
ERDF in total		10 815 044 164	1 520 642 672	1 476 042 393	1 406 450 047	1 457 151 528	1 654 282 393	1 603 417 440	1 697 057 691
CF in total		8 642 316 217	348 176 619	744 018 493	1 192 886 339	1 473 167 819	1 542 929 450	1 627 041 575	1 714 095 922
ESF in total		3 059 290 876	430 149 722	417 533 480	397 847 640	412 189 753	467 952 878	453 564 522	480 052 881
EAFRD		3 805 843 392	570 811 818	537 525 661	498 635 432	509 252 494	547 603 625	563 304 619	578 709 743
EFF		34 291 356	4 885 263	4 641 875	4 331 579	4 441 817	5 042 728	5 326 934	5 621 161

Regional competitiveness and employment objective — EUR, current prices, commitments

Operational programme	Source	Total	2007	2008	2009	2010	2011	2012	2013
Central Hungary OP	ERDF	1 506 802 363	508 622 538	400 038 109	286 906 854	169 090 333	46 446 389	47 375 317	48 322 823
Electronic Public Administration OP	ERDF								
Central Hungary Region		76 422 554	25 796 504	20 289 280	14 551 447	8 575 985	2 355 685	2 402 798	2 450 855
Social Renewal OP	ESF								
Central Hungary Region		404 182 559	136 432 199	107 305 663	76 959 493	45 356 554	12 458 714	12 707 889	12 962 047
State Reform OP	ESF								
Central Hungary Region		43 670 032	14 740 860	11 593 874	8 315 113	4 900 563	1 346 106	1 373 028	1 400 488
NSRF in total		2 031 077 508	685 592 101	539 226 926	386 732 907	227 923 435	62 606 894	63 859 032	65 136 213
ERDF in total		1 583 224 917	534 419 042	420 327 389	301 458 301	177 666 318	48 802 074	49 778 115	50 773 678
ESF in total		447 852 591	151 173 059	118 899 537	85 274 606	50 257 117	13 804 820	14 080 917	14 362 535

Source: The Government of the Republic of Hungary (2006): The New Hungary Development Plan 2007–2013. Employment and Growth. (National Strategic Reference Framework of Hungary) Accepted by the Hungarian Government on the 25th of October, 2006, pp. 123–124.

The Lisbon Reform Programme

In line with the re-launch of the Lisbon strategy, Hungary – as all the member states of the European Union (EU) – has prepared a National Reform Program (NRP) in order to summarise the main challenges and reform needs in the actual mid-term period (2005–2008). In line with the Lisbon process, the main fields analysed are macroeconomic, microeconomic and employment challenges and reforms.

Macroeconomic stability and financial balance are fundamental for the achievement of the objectives set in the NRP. Economic growth was originally expected to remain dynamic (4–4.5% annual real GDP growth) until 2008, but these expectations had to be readjusted in line with the modifications of the CP ; the same was true for consumption, and inflation forecasts also needed correction . Exports are – in the present situation more than earlier – crucial for growth, and the optimism of the NRP in this respect can be justified by the experiences of the previous years (Hungarian exports grew 3–4 percentage points higher than external demand even in recession).

An important underlying factor of this dynamism is the continuously increasing presence of foreign capital; the attractiveness of the country for foreign investors has to be further increased. Firms with foreign capital play a very important role in the export performance of Hungary, as well.

Priorities and measures in the macroeconomic field are related to different aspects. Structural changes are foreseen in order to secure economic stability (a pre-condition for sustainable growth). In order to reach long-term sustainability of the general government, inter-related reforms are necessary: pension reform, reform of healthcare, measures targeted at the increase of employment, and budgetary balance ensuring the appropriate rate of decrease of government debt. These measures have been put into the foreground by the important changes of the CP in 2006, and have already partly been concretised by changes in the regulation.

Decentralisation of income is a fundamental objective of fiscal policy, reform of the tax regime and of the contribution system being important instruments; again, the changes in the CP have put these issues into the foreground. In 2005 the government has proposed to contribute to greater predictability by launching the debate on a more predictable wage policy. This can also contribute to the objective of making macroeconomic, structural and employment policies more coherent.

Microeconomic situation and development is also crucial for Lisbon-related reforms. In Hungary, productivity is relatively lower than in the EU. This is due to a number of structural characteristics, the availability of capital (both physical and human), the competitiveness of the business sector and the efficiency of public services. Innovation expenditure in the business sector is low, as innovation capabilities, as well as demand for innovation are limited. R&D expenditure approximates only 1% of GDP (instead of 3% defined among the Lisbon objectives), and the share of the business sector is only about 30%. Concerning information society, despite recent dynamic development, Hungary lags far behind the EU average.

In order to induce positive changes leading to improve competitiveness, the NRP “puts emphasis on the spread of new (production) technologies, the training of flexible and adaptive labour, the development of intense R&D and innovation activities as well as operations creating ICT (information and communication technology assets, and on the modern physical infrastructure serving the economy” (NRP (2005), p. 5). There are different measures foreseen, including direct market developing steps (in order to extend competitiveness) encouraging the private sector to participate more actively in the R&D activity, and to facilitate the spread and utilisation of ICT. In Hungary, the quality of physical capital is a crucial question; especially, the development of infrastructure is an important pre-condition of improving competitiveness. This relates most importantly to transport

infrastructure, but other infrastructure development (R&D, innovation infrastructure, broadband etc.), as well as the improvement of the business environment and the intensification of competition is also important.
The Hungarian labour market is characterised by a relatively low level of activity/employment, coupled with a low rate of unemployment (see Table 2). The main challenge for labour market policy is the high rate of inactivity in the working-age population. Especially older age groups and men show a low employment rate. While for high-skilled people, labour market prospects are similar or better, for low-skilled people, such prospects are poorer than in other EU member states. A specific feature of the labour market is the clear disadvantage of the Roma population; disadvantages, however, also hit disabled people. Finally, territorial disparities regarding employment and unemployment are significant (with employment rates about 62% and unemployment rates under 5% in Central Hungary and Western Transdanubia, and employment rates about 50% and unemployment rates above 7% in the poorer Southern and Eastern regions; regarding smaller units, disparities are much more important).

Table 6

Linkages between the NRP and the NSRF

Revised National Lisbon Action Programme (NRP)	New Hungary Development Plan (NSRF)
State reform	State Reform OP
Strengthening the role of active labour market policies	Social Renewal OP Human Infrastructure OP
Targeted supports for the employment of the disadvantaged	Social Renewal OP Human Infrastructure OP
Training, life-long learning	Human Resources Development OP Human Infrastructure OP
Business environment improvement	Economic Development OP
Research/development and innovation	Economic Development OP Human Resources Development OP
Environment development	Environment Development OP
Energy policy	Environment Development OP
Infrastructure development and pro-competitive regulation	Economic Development OP Transport Development OP

Source: Hungary (2006): Revised National Action Programme for Growth and Employment, p. 76.

As it is shown in Table 6, there are important linkages between the NRP and the NSRF, and thus these programmes can strengthen each other. These linkages are logical and relatively easy to define, and the financing available for the NSRF can thus also (indirectly) contribute to the implementation of the NRP. The whole set of linkages between different programmes is, however, much more complicated; the various department policy strategies and measures considered to be indispensable for the implementation of the Lisbon Strategy objectives (and thus needing continuous monitoring of implementation) are listed in Table 7.

Table 7

NRP-related department policy strategies and reports

- Convergence Programme (1 September 2006)
- New Hungary Development Plan (2007–2013)
- Sustainable Development Strategy (under planning, date of presentation1 July, 2007)
- National Cancer Control Programme (2006–2013)
- National Infant and Child Healthcare Programme (November 2005 – 2013)
- National Public Health Programme (2003–2013)
- Green Paper on Hungarian Healthcare (26 July 2006)
- Energy Policy 2006–2015 – GKM studies
- Hungarian Information Society Strategy (2003–)
- National Broad Band Strategy (2005–2013)
- National Environment Protection Programme (2003–2008)
- National Strategy Report on Social Protection and Social Cohesion (under planning –Date of presentation: 15 October, 2006)
- Pension Strategy Report (2005–2006)
- Hungarian Strategy for Life–long Learning (2005–2013)
- Knowledge for All! Action Plan (2006–2010)
- Education IT Strategy (2004–2006)
- Equal Opportunity in Education Work Programme (31 August 2006)
- Medium Term Strategy for Science–technology and Innovation Policy (31 October 2006)
- Reforms in Education 2002–2006
- Vocational Training Strategy
- National Tourism Development Strategy (2005–2013)
- New Hungary Regional Development Strategic Plan (2007–2013)

Source: Hungary (2006): Revised National Action Programme for Growth and Employment, p. 7.

Concluding Remarks

In the period 2007–2013, Hungary has the possibility of making important progress on the way of economic catching-up : the external financial assistance coming from the EU funds creates very favorable financial conditions for this process. On the other hand, the first years of this period are also crucial for the macroeconomic stability of Hungary: the CP foresees restrictive measures for 2007–2008, and the return to the previous growth path (around or over 4% per year) is expected only from 2009.

As we have noted, it is very important that the CP guarantees that restrictive measures do not endanger the use of EU funds and the implementation of the NSRF. In this way, the programmes in the framework of the NSRF can also be regarded as factors diminishing (although to a different extent in different fields) the painful effects of the budgetary correction.

It is crucial that correction should be followed by real reforms: the CP foresees such reforms, and some of them are already designed and will be introduced as soon as in 2007. In the design of such reforms, the NSRF and the NRP have a very important role; the linkages between these two programmes have been shown above (in Table 6), but it is also obvious that there are important synergies with the CP, as well.

From what has been said above, it is very clear that Hungary should not handle any of the above programmes as just « homeworks », which can be solved by the creation of a certain amount of official papers. The implementation of the three programmes discussed is of crucial importance for the economic and social development of Hungary in the coming years.

References

Government of the Republic of Hungary (2004): Convergence Programme of Hungary 2005–2008.

Government of the Republic of Hungary (2005): Updated Convergence Programme of Hungary 2005–2008.

Government of the Republic of Hungary (2006a): Convergence Programme of Hungary 2005–2009 (September 2006).

Government of the Republic of Hungary (2006b): Convergence Programme of Hungary 2006–2010 (December 2006).

Hungary (2005): National Reform Programme for Growth and Employment.

Hungary (2006): Revised National Action Programme for Growth and Employment.

The Government of the Republic of Hungary (2006): The New Hungary Development Plan 2007–2013. Employment and Growth. (National Strategic Reference Framework of Hungary) Accepted by the Hungarian Government on the 25th of October, 2006.

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THE FEASIBILITY OF THE HUNGARIAN CONVERGENCE PROGRAMME

The paper provides on overview of the Hungarian Convergence Programme (CP) that envisages the path to restore macroeconomic equilibrium during the next three years. The spiralling budget deficit in 2006 made an update of the previous CP inevitable. In the September 2006 version the government shows strong commitment to face up to the fiscal imbalances and structural problems, yet several aspects question the feasibility of the Programme. The paper focuses on the evaluation of the major objectives and elements of the CP as well as on significant technical assumptions and external factors that may constitute a downside risk for the implementation. Besides introducing a corrective fiscal package the Convergence Program draws the outlines of several, long-awaited reforms of almost the entire sphere of the social welfare systems. As the primary focus is on the feasibility of the budgetary consolidation strategy, the paper deals with these reforms only in the context of the long-term sustainability of public finances.
JEL: E63

Introduction

September 1, 2006 marked the deadline for Hungary`s first reelected government since 1990 to hand in the national Convergence Programme (CP) to the European Commission. The Programme endorses several painful adjustment measures in a frantic effort to put Hungary back on the balance track and to restore the credibility of the government in Brussels as well as on global financial markets. Besides drawing a scenario for reaching the Maastricht convergence criteria that is necessary for the Euro introduction, the CP also gives the broad outlines of the long awaited reforms of the social welfare systems.
This paper provides an overview of the macroeconomic background and the major steps and possible effects of the Programme as well as its possible challenges and risks. The analysis focuses on the years 2007-2009 as this is the key period of the Convergence Programme, at the end of which fiscal balance and sustainable economic growth is expected to be restored. The CP contains only rough numbers for the period 2010-2011, which largely depend on the implementation of the restrictions during the first three years of the Programme. The paper gives only a broad overview of the planned educational, health care and pension reforms and

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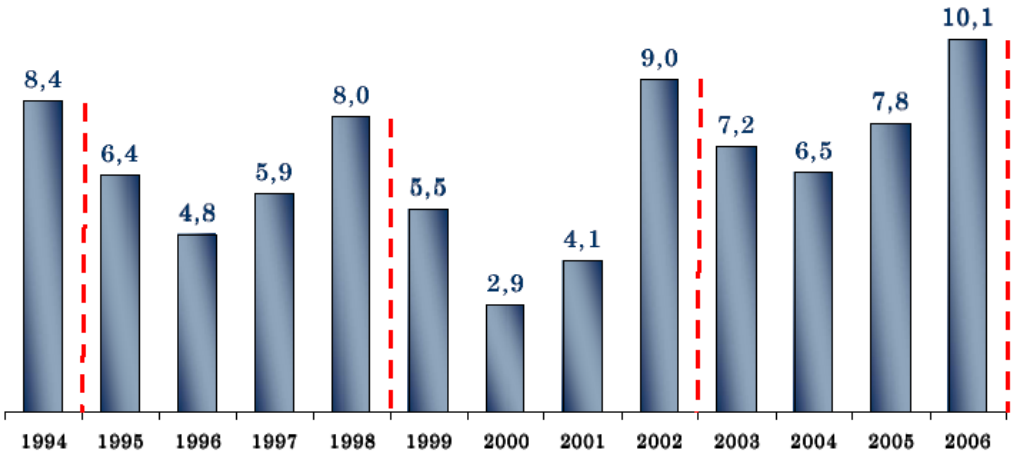
only in the context of the long-term sustainablity of government finances as analysing all these areas and the feasibility of the reforms would be definitely far beyond the reach of this paper.

The Background of the Convergence Programme

Election years do not usually enhance fiscal rigour but a roughly 10 % government deficit is still extraordinary. The Convergence Programme may finally break the „tradition" of election cycles that have been characteristic since the 1990s. (see Graph 1)

Graph 1

Government deficit in percentage of GDP, not including FISIM



Source: Ministry of Finance

The necessity of the measures outlined in the CP is out of question. The excessive twin deficit as well as the growing debt ratio make the present economic path for Hungary unsustainable. Hungary's macroeconomic performance is the worst in the EU at the moment in terms of fulfilling the Maastricht convergence criteria, which has also created concerns in Brussels. Between 2007 and 2013 Hungary will receive 22.4 billion euros development assistance from the EU[2] that can be at stake if the country does not show a macroeconomically sound and credible economic program to enhance convergence to the Maastricht criteria.
The EU gave a September deadline for the submission of the revised Convergence Programme, thus stressing not only the urgent need for reforms but leaving no room for political manoeuvre until the local elections in October.
Originally there were three scenarios to reduce the huge government deficit. The first visioned an extremely rapid adjustment, targeting the 3 percent criteria by 2008. The second, calculating with a relatively slow deficit reduction path, would have achieved this only by 2010. Finally, a third, relatively moderate slope was accepted that made 2009 the target date. This version is probably the most credible and realistic as an even more front-loaded effort would have raised a lot of

[2] The total sum amounts to approx. 30 billion euros including rural development assistance.

concern about the feasibility of the Programme, while on the other hand, it was feared that with a relatively slower path the GDP growth rate would be stucked at a level of 2 percent for several years.
The current Programme still outlines an ambitious plan to reduce the government deficit by 7.5 % (or by 6.8 %, after the corrections made in 2006) by the end of 2009. (See Table 1) Even with this substantial cut, deficit will be slightly higher (3.2 %) than the required 3 % threshold but the government hopes that Brussels will take into account a part of the net cost of the pension reform in line with the revised Stability and Growth Pact.[3] In the case of Hungary, in 2009 this would correspond to 20 % of the net cost of the pension reform or an estimated 0.3 % of the GDP. The majority of the reduction falls within the first two years of the CP (2007-2008), the first year alone accounting to almost half of the decrease. This means an extremely large burden assigned to the Hungarian economy and society.

Table 1

Key indicators of the Convergence Programme

	2005	2006	2007	2008	2009	2010	2011
Budget deficit (in % of GDP)	-7.8	-10.1	-6.8	-4.3	-3.2	-2.7	-2.2
Primary balance (in % of GDP)	-3.7	-6.2	-2.4	0.0	0.9	1.1	cca. 1.5
Gen. govt. gross debt (% of GDP)	61.7	67.5	70.1	71.3	69.3	67.5	65-66
CPI (change in %)	3.6	3.9	6.2	3.3	3.0	2.8	2.5–3

Source: Convergence Programme of Hungary 2006-2010, December 2006 pp. 15-18.

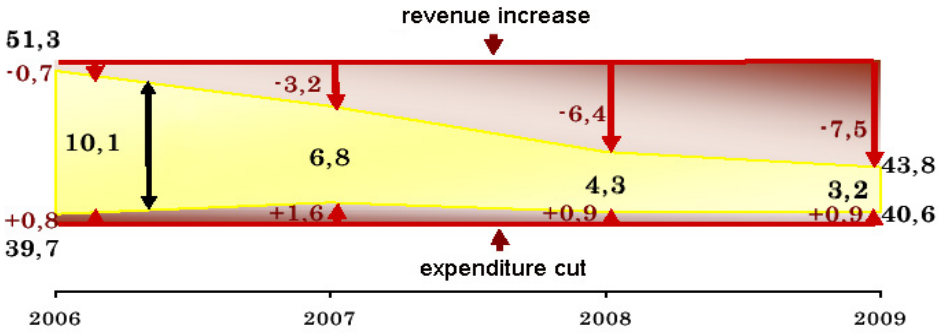
Evaluation of the major elements of the CP

The key factor of the Convergence Programme is the steep and front-loaded reduction of the large government deficit as mentioned above. The Programme has often been criticised for being too focused on increasing revenues and neglecting the expenditure side. (See Graph 2) Revenues will be increased mainly by larger tax centralisation including higher VAT, corporate and personal income taxes as well as the introduction of new taxes (e.g. the property tax). The government has also officially abandoned its five-year tax cut programme in 2006 that would have lowered budget revenues by around 3 % of GDP by 2010.

[3] According to Council Regulation (EC) No 1056/2005, if the general government deficit „…has declined substantioally and continously and has reached a level that come close to the reference value the Council and the Commission shold consider degressively the net cost of a pension reform that includes a fully funded pillar".

Graph 2

Government deficit, revenues and expenditures in percentage of GDP
(compared to the 2006 level without correction and not including EU transfers)



Source: Ministry of Finance

Regarding the expenditure side, the idea that the government should start saving money on itself has become quite popular. Public administration and generally governmental organizations definitely deserve some streamlining, which would drastically affect public employment. Approximately 200 public organizations face transformation during the following years and the whole public sector is expected to operate on a 14 % less budget and with about 20 % less employees. This will definitely affect the labor market, although the government hopes that it can be offset by a moderate growth of the business sector, thus letting the unemployment rate increase only on the short run.

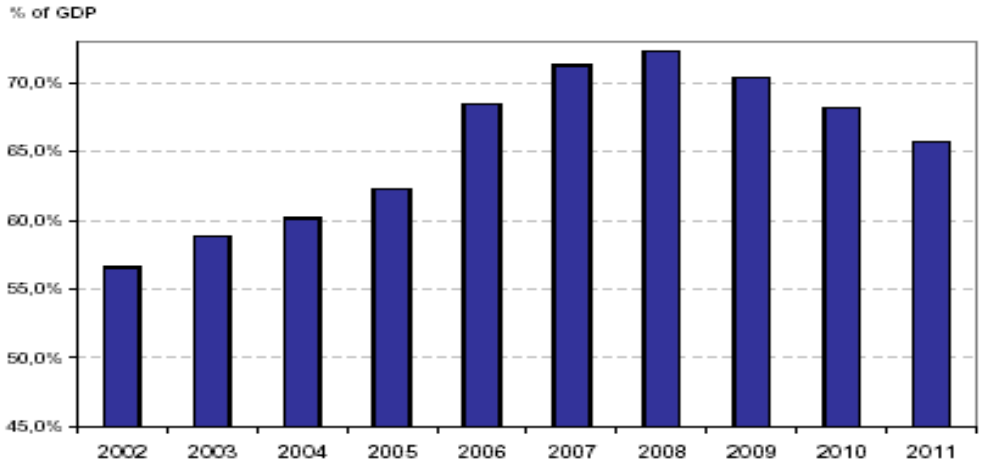
The CP broadly outlines the major directions of the long awaited reforms of the social welfare systems. The primary aim of these reforms is not only to cut expenses but also to improve the quality of public services provided by the central or local governments. There is no doubt that structural changes are inevitable, yet there is a lot of social resistance and suspition against the new measures. The complex reform of the educational, health care or pension systems is also on the agenda in old EU member states, however, the Hungarian social systems (and especially the pension system) constitutes an even higher risk regarding the sustainablilty of public finances. Hungary appears to be at an earlier stage of population ageing, and this, alongside with the still unresolved problems of the social welfare systems, threaten with long-term budgetary impacts. There are also voices of concern about the feasibility of the ambitious reforms while focusing on restoring the fiscal balance. Nevertheless, the biggest challenge that the Hungarian government faces nowadays is the successful and socially acceptable redefinition of the role of the state, meaning not only less redistributive and more market-driven solutions but also more effective and well-coordinated action in several areas.

An interesting point of the new Convergence Programme is the revised scenario for the public debt to GDP ratio, which is in sharp contrast with the previous versions. According to the current update of the CP, the gross government dept / GDP ratio is projected to significantly increase in 2006-2008 reaching its top (71.3 %) in 2008. This temporary rise can only be turned around in 2009 with the improvement of the primary balance as well as the revitalised economy and falling yields. Despite not

reaching the Maastricht threshold even at the end of the programme period, the government hopes that Brussels would take into account the constantly and steadily decreasing pace of the debt to GDP ratio.

Graph 3

Public debt to GDP ratio



Source: Convergence Programme of Hungary 2005–2009 (September 2006) p. 35.

As for consumer prices, the Programme is highly optimistic by assuming that inflation will only temporarily accelerate during 2007 and than return to the previous path, though not reaching the expected Maastricht level for several years. However, recent estimations of the National Bank have projected CPI as high as 9 % for the first quarter of 2007, so the inflation target for this year will probably have to be updated. On the other hand, minor divergence from the original numbers may be calculated with, as the National Bank itself sets only a mid-term inflation target (3 percent), thus leaving room for adjustment on the short run.

Disinflation in the past few years in Hungary was partly artificial as it was partly due to regulated prices that kept especially energy prices lower than the world price (e.g. electricity, natural gas prices) and the VAT reduction that took place at the end of 2005. In line with the decision to transform the subsidy system for energy, pharmaceuticals, transportation prices as well as to raise the VAT level of 15 % to 20 %, inflation will accelerate considerably in 2007. A stronger exchange rate and lower oil prices can influence this trend positively but the biggest responsibility still lies with the proper implementation and the credibility of the Convergence Programme as this can keep inflation expectations moderate.

The document is often criticized for cautiously avoiding setting an exact date for the Euro adoption. However, Hungary stands not alone with this kind of mysterious unpredictability in the region. Poland has not even attempted to predict an official date, although there have already been unofficial statements of a 2012-2013 introduction. 2012 may also be the target date according to the new national plan of the Czech Republic, however, nothing seems to urge Prague either. It is still Slovakia that seems most determined to undertake the promise of the previous government about the 2009 accession, even postponing the fulfilment of several

campaign slogans with this end. It is an interesting question why and how the once leading Central European group lost its comparative advantages in the ”Euro race”, even compared to the Baltic states.[4]
Although not announced officially, 2013 or more probably, 2014 can be the accession date for Hungary – provided that the measures of the CP will be implemented. Relatively late adoption of the Euro is not necessarily a drawback if policy makers finally realise that not premature, unprepared introduction, but a well-coordinated, predictable and credible pace of accession adjusted to the realistic economic and political capacities serves the country's interests best. Credibility also remains a key element in determining the behaviour of foreign investors. If government measures are transparent and consistent with the major objectives of the national programs (including mainly the National Strategic Reference Framework besides the Convergence Programme), a relatively short delay will probably cause no direct threats. However, an even further delayed accession may result in the relative devaluation of Hungary's position as well as a rearrangement of foreign direct investments that are vital for the Hungarian economy.
The biggest question remains if the economy can recover from the surgery as quickly as it is supposed to according to the Programme. The CP assumes that GDP growth rates as well as inflation will be affected negatively only on the short run and the economy can return to its previous dynamism as early as 2009. This is extremely important as by 2006 Hungary fell behind in terms of GDP growth rate even among the Central European countries.

Assumptions and external factors

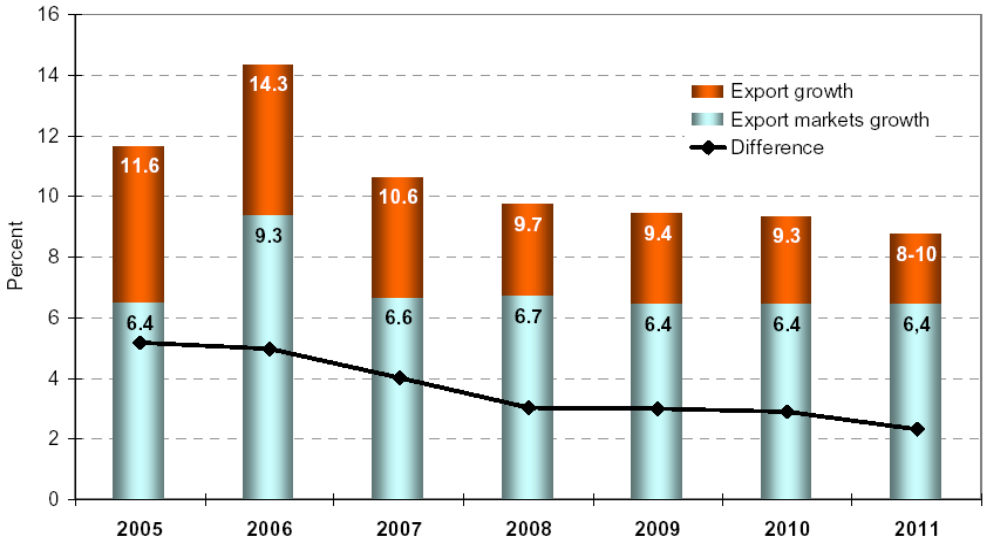
The assumptions of the Convergence Programme definitely include factors of uncertainty that may cause some divergence from the baseline results. There are basically five assumptions of the CP that either seem unrealistic or are far beyond the reach of the government.
The first factor that cannot be influenced by the government but definitely plays a key role in the realisation of the Programme is world- and especially EU GDP growth. The CP relies on the forecast of the European Commission that assumes a 2.0 – 2.2 percent GDP growth rate for the years 2007-2009. Although this rate seems realistic for 2007 and according to recent projections, the EU GDP may reach even higher dynamism mainly due to the German economy[5], a possible slowdown may pose risks for the implementation of the Programme.
A second and recently overdiscussed topic is the question of energy prices. The Programme calculates with stable oil prices using a model of 70 USD/bbl for the period of 2007-2009. This can certainly be challenged by a sharp increase resembling that of last summer but the government assumes that a 15 USD/barrel difference can be still managed within the baseline results of the Programme. Considering that a possible increase rather affects the current account balance than the amount of revenues, this optimism can be at least partly explained.

[4] Though having excellent fiscal indicators, Estonia and Latvia already had to postpone the introduction of the single currency as a result of high inflation rates. It is a common problem of the new member states trying to catch up quickly that due to their overheated economy and extremely high GDP growth rates (approx. 10 % in the Baltic states) they are unable to keep the inflation criterion.
[5] As a result of recent positive changes, the September version was slightly reviewed and the actual Program projects 2.2 – 2.4 percent EU GDP growth.

However, there is no reason for such optimism in the case of investments and export dynamism. As apart from capital investments, growth will remain mainly export-driven in the following years, any negative changes may have large spill-over effects. The export projection is primarily based on the growth of external demand that is supposed to remain relatively stable, thus gradually reaching a better trade balance, with a possible surplus in 2011. On the one hand, the Hungarian export is quite vulnerable, with almost half of it originating from short production lines that are placed in Hungary only for a specific phase of the production. On the other hand, external demand and the growth of foreign markets largely depends on the growth of the EU economy.

Graph 3

The growth rate of exports and export markets



Source: Convergence Programme of Hungary 2006-2010, December 2006 p.10.

As for investments, household income and therefore available resources for investment will decline especially in the first two years of the CP due to the stabilisation measures and a temporarily higher inflation. However, according to the projections, investment ratio will reach 25 % by 2009, which seems too optimistic. The government hopes to enhance investment dynamism with the increased use of EU resources and cofinanced national investment projects, mainly in the fields of transportation systems, renewable energy sources and health infrastructure.

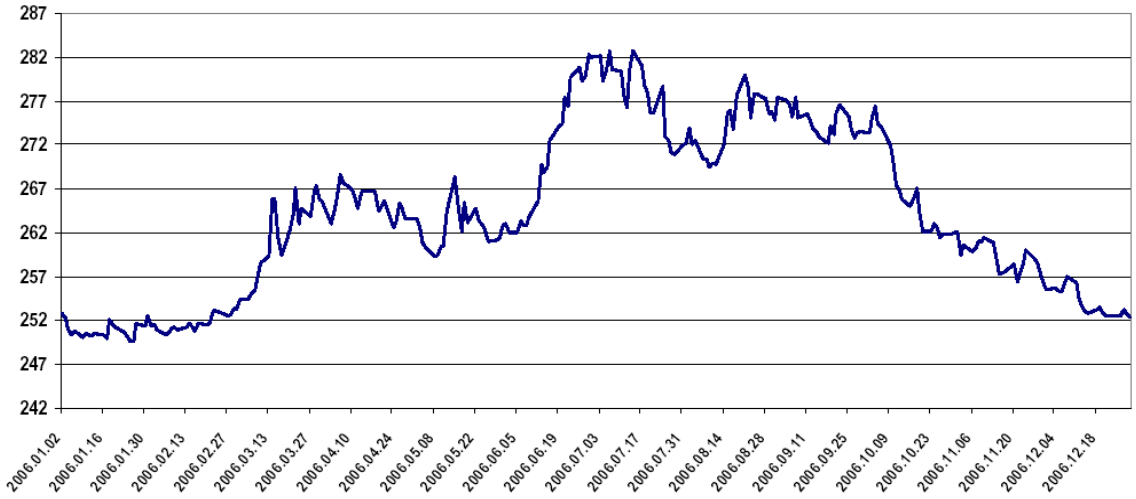
A final assumption of the model is about the exchange rate – the Programme calculates with a technical rate of 271 HUF/Euro for the period of 2007-2009.[6] Since 2001, Hungarian monetary policy has been focusing primarily on inflation targeting, accompanied by a wide-band pegged exchange rate system. The exchange rate may fluctuate against the Euro within a band of +/- 15 %. The national currency was markedly stable until the end of 2005, but fluctuated greatly during 2006, and there were even projections about a possible 300 HUF/Euro rate.

[6] This data was also slightly modified as the previous version used an exchange rate of 272.5 HUF/Euro.

However, after the Commission and the Ecofin gave a positive response to the Convergence Programme, the exchange rate began to strengthen indicating the growing trust of the markets. Following significant appreciation of the national currency in the last few months the debt stock was effected very positively.[7] Thus, the exchange rate seems to pose a smaller threat to the feasibility of the CP but this can change during a three-year period.

Graph 4

The HUF/Euro exchange rate in 2006



Source: Ministry of Finance

A key element of the CP is the projected GDP growth that is partly derived from the assumptions described above. As a result of the fiscal consolidation, domestic demand will decrease sharply in the first two years of the Programme. GDP growth will significantly slow down and the real output level will drop below the potential output. As a result, the output gap will become negative, reaching approximately -2 % of the potential output in 2008-2009. According to the objectives of the CP, from 2009 real GDP growth will accelarate and rise to the level prevailing before 2007, which is a very positive scenario (see Table 2 for detailed data). The December version of the CP includes some slightly positive adjustments mainly due to the better global and Hungarian economic performance that gave birth to some even more optimistic projections assuming that the Hungarian economy can reach its growth potential even earlier than expected. However, even with these optimistic assumptions the possible growth sacrifice is significant, leaving a slightly negative output gap even in 2011.[8] This growth sacrifice could be partly reduced by proper adjustment of the national development programs, mainly the National Strategic Reference Framework (NSRF – also called New Hungary Development Plan in

[7] Approximately 30 % of the debt portfolio is denominated in foreign currency (essentially in Euro), so a 10 % exchange rate change would have about 2.0 percentage point impact on the debt ratio.

[8] Data and estimation is based on the Convergence Program that uses the Cobb-Douglas production function for the calculation of the potential GDP following the methodological recommendation of the Commission.

Hungarian). The NSRF should focus on such economic programs that can have a positive impact already on the short run and strenghten economic growth by enhancing competitiveness, employment and domestic demand, thus making up for part of the negative effects of the CP.

Table 2

GDP components and growth

annual percentage change

	2005	2006	2007	2008	2009	2010	2011
Household consumption	3.8	2.4	-0.8	0.0	1.8	2.7	cca.3
Government consumption	0.2	2.6	-1.6	-3.3	1.6	1.6	1.5-2
Investment	5.6	2.8	2.4	4.0	7.5	6.8	6-8
Domestic comsumption	1.4	2.0	0.3	0.7	3.3	3.7	cca.4
Exports (goods and services)	11.6	14.3	10.6	9.7	9.4	9.3	8-10
Total demand	5.3	6.8	4.6	4.7	6.2	6.4	6-7
Imports (goods and services)	6.8	11.1	8.1	7.5	8.6	8.9	8-10
GDP (at 2005 year prices)	4.2	4.0	2.2	2.6	4.2	4.3	cca.4.5
Potential GDP	4.0	4.1	4.0	3.9	3.9	3.8	3.8
Output gap	1.3	1.2	-0.6	-1.8	-1.5	-1.0	cca. -0.5

Source: Convergence Programme of Hungary, December 2006, pp. 9-13.

The Convergence Programme also admits the relevance of the risks deriving from the factors mentioned above. Though it is based on assumptions and estimations achievable with the highest certainty, calculations have also been made for different macroeconomic tendencies. The September version introduces for the first time alternative scenarios, namely four, reduced to three by the December update. They are based on mainly two variables: domestic and external demand.[9] The more positive and more negative projections basically fall within a +/- 0.3 percent band from the baseline scenario in terms of GDP growth difference, which means a maximum of -0.3-0.4 percentage point divergence for the budget balance (in percentage of GDP). According to government projections, this risk can be offset with reserves and reserve measures built into the budget. These include the newly introduced property tax or the equilibrium reserve that both account for approximately 0.3 percent of the GDP but are not shown on the revenue side yet.

The feasibility of the CP

Besides the major challenges arising from the internal and external factors described above the key element of the Convergence Program is credibility. Credibility has several dimensions and aspects, the first of which is international. Although several slight downgrades in terms of credit rating have shown diminishing international confidence in Hungary, the Commission as well as the Ecofin indicated their support for the CP by the quick approval of the Programme. However, Hungary has to pay more attention to the consistency and the implementation of the measures. Especially the September 2006 version marked a large and negative update to the previous programmes while the December update meant some slightly positive changes.

[9] The scenario based on higher oil prices and higher inflation was removed from the December update.

Table 3

Divergence of the September 2006 CP from the 2005 update

		2005	2006	2007	2008	2009
Real GDP growth (%)	CP 2005	4.2	4.3	4.1	4.1	-
	CP 2006 Sept	4.1	4.1	2.2	2.6	4.1
Govt. deficit (% of GDP)	CP 2005	7.4	6.1	4.7	3.4	-
	CP 2006 Sept	7.5	10.1	6.8	4.3	3.2
Gen. govt. gross debt	CP 2005	61.5	63.0	63.2	62.3	-
(% of GDP)	CP2006 Sept	62.3	68.5	71.3	72.3	70.4

Source: Convergence Programme of Hungary 2005–2009 (September 2006). p. 63.

On the other hand, domestic credibility and legitimacy of the CP is a more delicate issue. The success of the fiscal tightening will largely depend on the social capacity and willingness to accept the increased burden. As the example of the Slovenian inflation reduction has shown in recent years, quick and efficient measures can only be based on widespread social and economic consensus. As the majority of the Hungarian deficit reduction is based on increased taxation, the main issue will remain if all the expected tax revenues can be collected. The adjustment measures may push an even larger part of the society towards the grey and black economy, the size of which is already substantial.

The incredibly low social acceptance of the government measures is mainly due to two factors. First, the center-right opposition suggests that there would be an alternative, less painful scenario for deficit reduction and social reforms without giving exact details and analysis about the alternative programmes. However, according to the logic of the Hungarian quasi-two party system, the opposition is not interested in taking part of the responsibility in the ongoing programmes, thus undermining any substantial changes or reforms that would require a qualified majority decision as well as ruining the possibility of any widespread social consensus. On the other hand, the ruling socialist-liberal democrat coalition is responsible not only for the major part of the broken equilibrium but also for the poor communication results. The majority of the Hungarian society does not understand the necessity of the programmes and even if they agree with the diagnosis of the major problems and some of the solution attempts, they do not see how these random, undeveloped measures will form a coherent and well-defined programme.

Short-term fiscal consolidation is definitely easier than reaching long-term sustainablity of government finances and the social welfare systems. The government shows high commitment towards the implementation of the programmes and seems ready to perform tighter fiscal discipline. A recently passed act allowing only a surplus of the primary balance from 2008, as well as the close supervision of the EU can safeguard this. The government has to report every six months to the Commission, the next occasion being in April, when the results and drawbacks of the Convergence Programme will also be measured.

The feasibility of the reforms is a more complex issue. Economy as well as politics is made on double levels: besides a national one there exists a community level of decision-making. The community level can empower national governments to carry out difficult reforms, however, it may also serve as an excellent excuse for their failure to undertake unpopular policy decisions. Hopefully, the current reforms in

Hungary will be rather fueled by Brussels` determination to welcome only economically sound new members in the Eurozone. Hungary has already paid a large price for having continuously postponed some vital reforms. If the present programme means no real, profound changes, just a new facelift on the old body of the social welfare system, that price will still increase.

References

Commission of the European Communities [2006]: Commission's assessment of the public finance situation in Hungary in relation to the September 2006 convergence programme and to the excessive deficit procedure (26 September, 2006)
Council Regulation (EC) No 1056/2005 of 27 June 2005
Government of the Republic of Hungary [2004]: Convergence Programme of Hungary 2005–2008.
Government of the Republic of Hungary [2005]: Updated Convergence Programme of Hungary 2005–2008.
Government of the Republic of Hungary [2006a]: Convergence Programme of Hungary 2005–2009 (September 2006).
Government of the Republic of Hungary [2006b]: Convergence Programme of Hungary 2006–2010 (December 2006).
The Government of the Republic of Hungary [2006]: The New Hungary Development Plan 2007–2013. Employment and Growth. (National Strategic Reference Framework of Hungary)
Ministry of Finance: http://www2.pm.gov.hu
National Bank of Hungary: http://www.mnb.hu

Икономически изследвания
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FOREIGN INVESTMENTS AND ECONOMIC CATCHING UP: THE CASE OF HUNGARY

Both economic history and theory show us that foreign capital is indispensable in the process of modernization. Countries in Central and Eastern Europe in the late 80s were facing an extremely challenging double task: they had to transform both their political and economic systems. Despite the difficulties most of them tackled all the problems with remarkable success, creating the bases of market economies and democracies simultaneously. Rapid privatization and institution building signed the way of Hungary, the first mover in the transition process, and – as a consequence – strong capital inflow (mostly FDI) occurred. The domination of MNCs has become evident by now, and outward investments began to rise, too. In this paper we analyze foreign direct investments in Hungary, the activities of multinational companies, and the characteristics of outward investments in the last two decades.
JEL: F23, G31, G38

The last couple of decades in Central and Eastern Europe have proven that it is possible to simultaneously transform the political and the economic system from a socialist command economy and a communist political regime to a market economy in a democratic environment. Almost all of the countries in the region have shown remarkable performance since the beginning of the transition process, and as a sign of their maturity, ten of them have successfully joined the EU. One of the most striking features of the development was the huge capital inflow into the region, which dramatically altered not only the structure and functioning of domestic economies, but also their positions and roles in the world economy.

This transformation has been paralleled by another, which – among others – has dramatically changed the relationship between enterprises, states, and even individuals, created new production and management solutions, and made information the most important factor of production. This process, globalization, has been very deep, and can be caught not only in the economy, but in politics, and social relations, too. However, we can easily identify the main agent of these changes: it is the multinational enterprise (MNE). In this paper we will try to link the post socialist transformation to the activities of MNEs. We will assess their contribution to the catching up process both in theory and practice, study some lessons from economic history, and analyze how important foreign direct investment has been in Hungary, where the transition first completed.

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In the first part of the paper we turn to economic history, and try to search for some examples that show strong links between rapid development and foreign capital imports. Then we sketch some theoretical considerations regarding foreign direct investments and the activities of MNEs, review the earliest literature in the subject, and set up the theoretical frame we will use in the next two parts. Both of them deal with Hungary, the first mover in the transformation process. In the first we will analyze several aspects of inward investments: industrial patterns, technological characteristics, and foreign trade linkages. In the second we will assess the possibilities of Hungarian outward investments. We will conclude with some general observations, and remarks.

Lessons from Economic History

Foreign direct investments first occurred in the late nineteenth century, and always had a crucial role in shaping economic relations. In the last two or three decades the process has accelerated in a large extent, and transformed the whole system of worldwide production and services. Capital transfers affected both home and host economies, and influenced the relative positions of the countries in the world economy.

Although original forms of capital exports appeared already in the seventeenth century (in form of trading posts), true multinational firms in organized form were created only two centuries later. In that era the most powerful nation in the world was undoubtedly Britain, but two contenders were narrowing the gap step by step: Germany in Europe, and the United States in America. Although British investors made huge investments abroad, these were mainly portfolio investments. If we consider the size of the empire, and the fact that it was the British financial power (not the British enterprises) that underpinned its role as a leader, we can't be surprised at this phenomenon.

At the same time the new challengers invested more and more direct capital to nearby regions: Germans to Central and Eastern Europe, and Americans to Central and South America, while at home the rapidly growing domestic companies became the motors of development[2]. These domestic companies operated in industries which were in the forefront of technological development: machinery, electricity, and chemistry. They obtained competitive advantages not only by means of their technological advantages, but by their new organizational practices. This era (sometimes called second industrial revolution) saw the development of modern industries and with it successes of capital exporters[3]. Soon the new leaders in the world economy were the United States and in Europe Germany. However, rapid economic growth occurred not only in capital exporter countries, but in host economies, too. Areas that attracted lots of capital, like Russia or the Austro-Hungarian Monarchy also showed remarkable development. The liberalized environment allowed both the leaders and the followers to accelerate their growth rate. The most important factors of success were high R&D expenditures, introduction of modern management techniques, and the creation of unified markets.

[2] See Wilkins [1970].
[3] See Chandler [1990].

After World War II the United States got in a hegemonic position, while the isolation of the socialist world stopped the capital flow in that direction. From our point of view the most interesting feature of these decades was the emergence of Japan as an economic challenger of the United States. Like in the case of the United States and Germany FDI here didn't play a crucial role in development, too[4]. But, contrary to the period of the second industrial revolution, Japan's success story was neither based upon its originality, nor its prominence in technology. The factors behind the wonder based upon its cultural heritage: adaptation, discipline, and well-defined economic strategy. Once again it was the performance of the domestic enterprises that promoted rapid economic growth. Foreign capital existed only in form of joint ventures, while the export oriented strategy went together with protectionist trade policy and with the revival of the traditional Japanese enterprise system. By the 80s Japan had become one of the most developed countries in the world.
In the last couple of decades there were other successful attempts to join the narrow group of developed countries, above all in East and Southeast Asia. Rapid economic growth occurred among others in Singapore, South Korea and Taiwan. They followed similar strategy to the Japanese one, but because of the relative weakness of domestic capital sources they relied mainly on foreign direct investment. Learning the lessons of the Japanese way these countries sought possibilities in industries where comparative advantages could be exploited at the given level of development: first labor intensive industries, then in heavy industries, after that in electronics, and nowadays in high tech industries. Behind the successes here we can also find high R&D expenditures and proper economic policy.

Theoretical Background

Lessons from economic history slowly began to influence economic theory, too. In the beginning economists didn't study the activities of large multinational companies, they were instead targets of political economists[5]. Oligopolistic (or sometimes monopolistic) competition based on economic power and increasing economies of scale[6] didn't fit into the paradigm of classical economics based on perfect competition. From the middle of the twentieth century more and more researchers began to study large corporations and foreign direct investments. They wanted to answer such questions like why companies started to found affiliates abroad instead of exporting their products. After the groundbreaking works of Hymer[7] and Vernon[8] it was Dunning[9] who reached a systematic and coherent synthesis in his so called eclectic theory, in which he studied the most important causes of foreign direct investments.
In the center of the theory stands the well-known OLI paradigm, which tries to catch the causes of foreign direct investments in three factors. First, there are owner-specific advantages like intangible assets of the firm, technological advantages, or any other firm-specific assets. Second, there are location-specific

[4] Wilkins [1974]
[5] like e.g. Hilferding [1955].
[6] see Arthur [1989]
[7] Hymer [1976].
[8] Vernon [1966].
[9] Dunning [1993].

advantages, which occur in the location of the investment in forms of raw materials, exploitable markets, or attractive factors of production. And third, there are internalization advantages, which can be make use of by internalizing conditions that are external to the firm, so they can be integrate into the firm's own production and management system. According to Dunning multinational companies choose to outsource their production instead of exporting due to the combination of these three factors.

Vernon tried to answer the question why companies moved abroad in a given point of time. He investigated links between the life cycles of products (or industries) and the timing of foreign direct investments[10]. He found that firms moved abroad when the product was already standardized, R&D expenditures decreased, and specific decisions were followed by routine processes. These tasks were much easier to be carried out by less qualified workers, and could be transferred to an affiliate. Other researchers made distinctions between different types of multinational firms, like exporting, multidomestic, and global ones, as a measure, how centralized a company was.

It was once again Dunning who systematized the types of motivations of MNCs in moving abroad. The four groups he made are as follows: resource seeking, market seeking, strategic asset seeking, and efficiency seeking investments. In the next part of this paper we will investigate these different motivations in the context of direct investments in Hungary. We will talk about the timing, goals, and types of investments, and analyze the contribution of MNEs to the performance of the Hungarian economy.

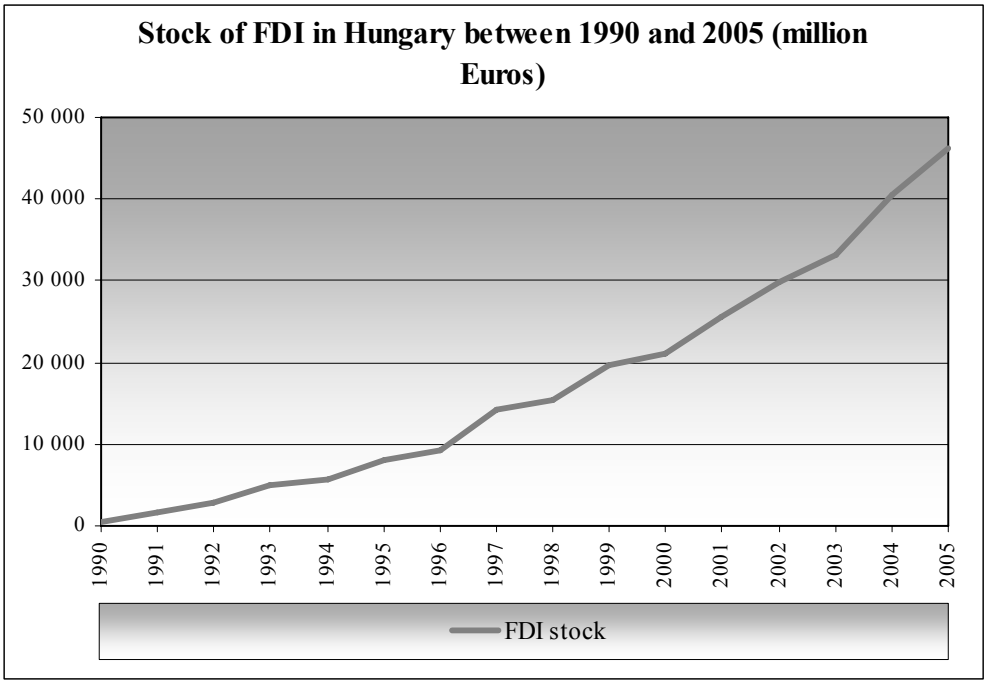
Foreign Direct Investments in Hungary

In Hungary the building up of institutions of the market economy, and the catching up process to other developed countries has begun after 1990. The out of date, ineffective, and deformed firm-structure hasn't been sustainable, it needed radical transformation[11]. This simultaneous need of modernization and transformation required so much capital that exceeded the possibilities of the country. The weakness of both private and state capital (and the indebtedness of the latter) made it evident that without significant capital import the tasks couldn't be carried out.

Most of the countries in the modernization process used a huge amount of foreign capital to narrow the gap between them and the developed ones, and this capital import consisted of mainly portfolio, not direct investments. However, the situation in Central and Eastern Europe has been largely different from that of modernizing Western European, and American countries, especially because of the joint need of rapid catching up, and the difficulties of building up the institutional framework. The latter included the lack of financial institutions, which were crucial to channel savings from households to the investors. So, in the beginning, it was obvious that foreign investors could only choose the form of direct investments. Diagram 1 shows the stock of foreign direct investment since 1990:

[10] In an article Székely-Doby [2006] tried to apply the theory to the IT industries.
[11] See: Kornai [1993].

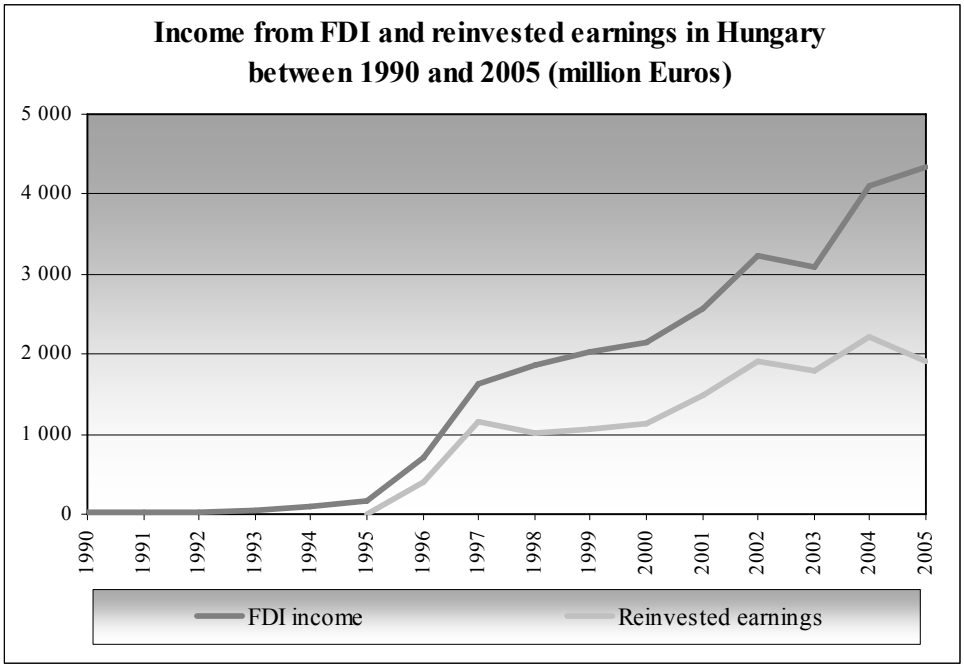
Diagram 1



Source of data: Hungarian National Bank (MNB [web])

As we can see, the presence of foreign capital in Hungary is very substantial. Beside the huge capital stock, the share of foreign-owned companies in value added in different industries is very impressive, too. In all industries this is about 40 percent, but in the transportation equipments industry, and electrical machinery their shares are much higher: 90, and 84 percent, respectively. Because these are largely capital intensive industries, it is not surprising that their share in assets (45 percent) is even higher than that of value added, and that their weights in employment is only about 25 percent. There is a large gap in foreign gross fixed investments between manufacturing and services industries. Compared to all gross capital formation, their share is 70 percent in the former, and hardly more than 20 percent in the latter. The role of multinational companies is especially crucial in Hungarian foreign trade: 80 percent of all exports and 75 percent of all imports are linked to them. The most important branches are machinery and transportation equipment industry with 90, and 85 percent shares in exports and imports respectively.

Diagram 2



Source of data: Hungarian National Bank (MNB [web])

Investments tend to be profitable only after some time, usually two to five years. The same phenomenon occurred in Hungary after the systemic transformation. On Diagram 2 we can see the income of foreign affiliates in Hungary in the past one and a half decade. Data illustrate that income began to rise in the middle of the 90s, after a four or five year lag. The situation with reinvested earnings is similar to this, with the difference that profit repatriation began after 1997. However, this process seems to be natural, and we mustn't treat it as an adverse symptom of foreign investments. On the contrary, this underlines the profitability of Hungarian businesses, and until reinvested earnings are high enough, we can be optimistic.
Composition of Hungarian FDI stocks is shown in table 1. About three quarters of all investments came from the from the former 15 member states of the EU, with three countries (Germany, the Netherlands, and Austria) comprising more than half of them. In the same time, the other two members of the Triad, the United States, and Japan have only a share of about 6 percent. To be correct, we have to add that after the systemic change the largest American multinationals were among the first who invested in Hungary, but after buying out strategically important companies, their interest diminished dramatically. These figures show that even amid strong globalizing tendencies, geographic proximity plays a crucial role in choosing locations for production, and services. From this point of view EU membership through unifying regulation and institutional solutions only strengthens these processes.

Table 1

Stock of FDI by countries of origin in Hungary (million Euros)

	1998	1999	2000	2001	2002	2003	2004
Germany	6 317	8 607	7 875	8 576	9 680	9 694	11 808
The Netherlands	2 183	2 700	3 074	3 828	4 412	6 523	7 174
Austria	1 370	1 557	1 870	2 755	3 236	3 725	4 594
France	865	1 056	1 161	1 392	1 571	1 442	1 905
USA	1 050	1 284	1 597	2 273	2 473	1 729	1 805
Luxembourg	128	208	231	317	471	1 451	1 802
Japan	122	145	139	426	520	569	675
Other	3 272	4 180	5 102	5 977	7 396	8 106	10 664
EU15	11 938	15 318	15 955	19 132	22 175	26 399	31 619
EU25	12 050	15 438	16 143	19 342	22 521	26 691	31 884
Total	*15 306*	*19 738*	*21 048*	*25 543*	*29 758*	*33 239*	*40 426*

Source of data: Hungarian National Bank (MNB [web])

When we were talking about FDI theories, we mentioned four kinds of motivation that could drive investments. These were: resource seeking, market seeking, strategic asset seeking, and efficiency seeking investments. Timing of investments in Hungary follows a specific pattern regarding these categories. In the beginning of the transition process large multinational companies acquired those Hungarian state enterprises that were highly competitive in world markets (like privatization of Tungsram by General Electric). The main goal of these investments was to acquire unique strategic values that could largely contribute to the functioning of the global production network of the multinational firm. Early in this period there were another wave of investments that aimed at acquiring Hungarian (and sometimes whole regional) markets (e.g. in Hungarian food, beverages, and tobacco industries).
These “first round” privatization transactions were carried out by large multinational companies independently from their geographic origins. Other resource seeking investments began to rise only after this initial wave of FDI, and were driven mainly by the relatively cheap labor force. Contrary to strategic investments these ones were less long-lasting, and foreign investors frequently moved further searching even cheaper environment for their activities (the most evident example of this behavior was the downsizing of the hardware manufacturing complex of IBM). Because the last type of motivation according to the theory is to improve efficiency, which is part of the global strategic optimization process, it is very difficult to link it either to particular industries or companies. At the same time it is obvious that if we can join these global network systems, Hungary can largely improve its competitiveness position in the long run.

Table 2

Stock of FDI by industries in Hungary (million Euros)

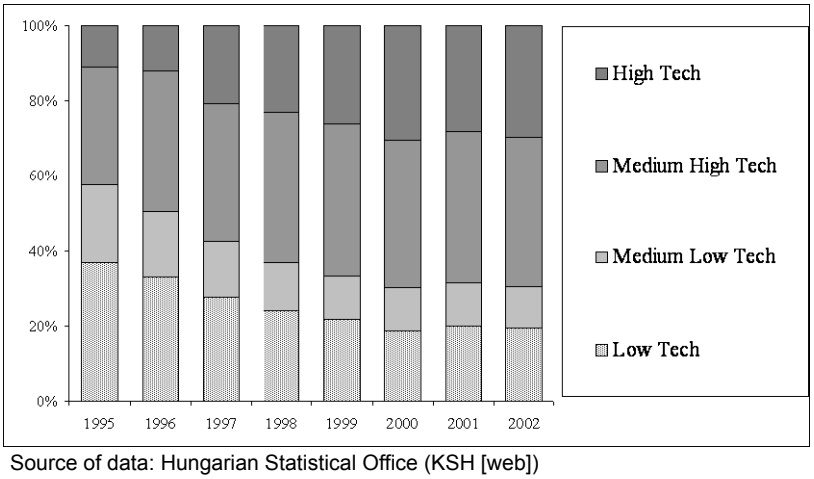
	1998	1999	2000	2001	2002	2003	2004
Transportation equipments	849	1454	1661	2833	3247	3762	4387
Chemicals	611	787	1004	1315	1696	2523	2318
Food, beverages, tobacco	1107	1248	1478	1882	2022	1976	2093
Electric machinery	1331	1541	1892	2438	2754	2981	3571
Other manufacturing	1834	2162	2435	3119	3890	3963	5493
Trade	1358	1718	1954	2649	3469	3250	4067
Transportation, post, telecommunications	3323	4755	3477	2968	2968	2872	3989
Finances	1558	1826	2133	2689	3062	3343	4262
Real estate, business services	887	1565	2380	2672	3435	5629	6798
Total	*15306*	*19738*	*21048*	*25543*	*29758*	*33239*	*40426*

Source of data: Hungarian National Bank (MNB [web])

In table 2 we can see FDI by industries in Hungary. There are several interesting trends behind the numbers. First, nearly all industries show dynamic growth rates, due to mainly reinvested earnings. Second, there are new areas in the FDI landscape where the growth rates are even higher: the most prominent are finances, and other business services (including software services). Investment stock in these areas had become fourfold in 6 years, and reached a remarkable 25 percent share in all FDI stocks. This fact illustrates a new trend towards industries with higher technological level seeking relatively cheap but highly skilled workforce. Diagram 3 shows the technological breakdown of Hungarian exports.

Diagram 3

Technological breakdown of Hungarian exports

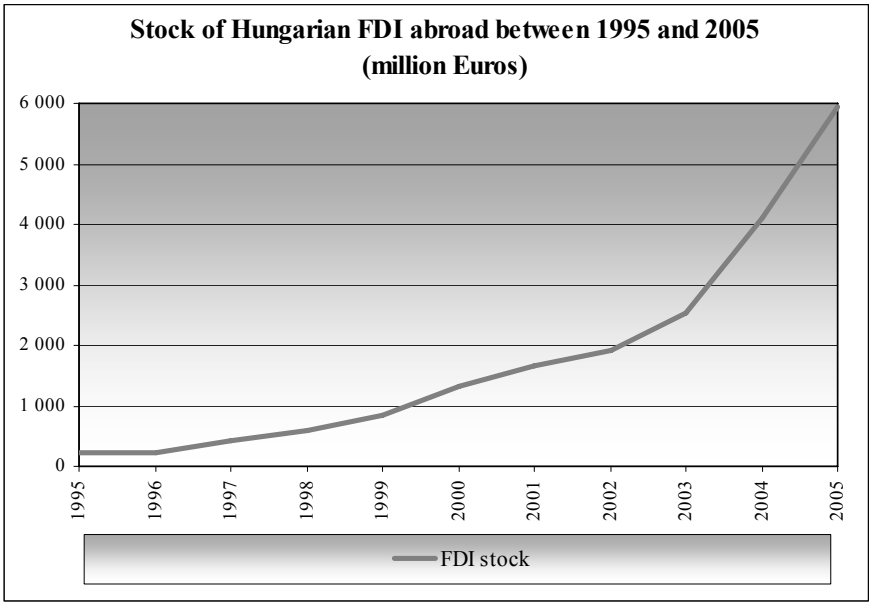


Source of data: Hungarian Statistical Office (KSH [web])

Hungarian Investments Abroad

The level of economic development in a country is well demonstrated by the ability of domestic businesses to invest abroad. Although for a decade in Central and Eastern Europe transition countries had been almost exclusively targets of inward FDI, from the late 90s some of them have shown also signs of growing FDI outflows. In the beginning challenges of the systemic change, and all the difficulties arose in the process didn't enable domestic enterprises to spread their influence across borders, so it was only at the end of the millennium when substantial outward investments were made. Economic history teaches us that countries in the catching up process begin to invest abroad very soon after the first huge wave of inward investments.

Diagram 4



Source of data: Hungarian National Bank (MNB [web])

Hungary was the first country in the region that began to invest larger amounts of capital abroad, less than 10 years after the fall of the iron curtain. Values of Hungarian outward investment stock are shown in diagram 4. The main targets of these investments (with more then three quarters of all stocks) are the countries in the CEE region: Slovakia, Macedonia, Croatia, Poland, Bulgaria, and Romania. Because the Hungarian economy is relatively small, we can't expect that outward investments are to a great extent diversified. On the contrary, it is much more probable that only the biggest companies have the power to expand abroad. And, indeed, this is the situation in Hungary: the biggest investors are shown in table 3. It is also evident that beside the low number of companies with outward FDI the number of industries is even lower. We can find substantial FDI only in three industries: oil industry, finances, and wholesale trade. Although capital outflows are

relatively small compared to those of from more developed countries, they seem quite significant in regional context.

Table 3

Largest Hungarian companies investing abroad

Company	Industry	Country
Dunapack	Paper and paperboard	Poland, Ukraine, Croatia, Romania, Bulgaria
Magyar Telecom	Telecommunications	Macedonia
Mol	Refined petroleum products	Slovakia, Croatia
Pannonplast	Rubber and plastic products	Romania, Ukraine
OTP Bank	Financial intermediation	Slovakia, Bulgaria, Croatia, Romania
Richter Gedeon	Pharmaceuticals	Poland, Romania, Ukraine, Russia
Synergon	Business and management consultancy activities	Czech Republic, Croatia
Videoton	Electronics	Bulgaria
Zalakerámia	Ceramic tiles and flags	Croatia, Romania

Source: Túry [2005].

The amount of FDI outflows is very important not only because of the activities of the largest Hungarian multinational companies, but also because of two other reasons. First, regional position of a country is largely determined by its economic power, which is tightly linked with the power of its largest companies. In this sense Hungary can have a very influential role in shaping regional economic processes through outward FDI. Second, income from affiliates can largely improve the current account, which can be very important in the future. Although so far this contribution hasn't been too significant (a little more than 700 million euros in 2005), we expect it to rise dramatically in the years to come. Another important feature may be the continuing expansion of small and medium enterprises. This prospect is not surprising at all because of cultural similarities and the Hungarian minorities in neighboring countries. Industries like food processing, tourism, retail trade, health care, and other services where knowledge of the place and the language is of great importance can offer the most possibilities for these enterprises.

Concluding Remarks

Both economic history and theory show us that foreign capital has been indispensable in the process of modernization. The double challenge that occurred in the late 80s for countries in Central and Eastern Europe seemed extremely difficult to answer. But most of them tackled all the problems with remarkable success, creating the bases of market economies and democracies simultaneously. Rapid privatization and institution building signed the way of Hungary, the first mover in the transition process, and – as a consequence – strong capital inflow (mostly FDI) occurred. The domination of MNCs has become evident by now, and as a marker of development outward investments began to rise, too.

How to deal with these phenomena? Should a small open economy take steps to induce even more foreign capital inflows, or is it time instead to help small and medium enterprises rather than MNEs? What about outward investments? Are they truly fingerprints of a mature economy, or should we treat them as a consequence of unique positions of some huge Hungarian enterprises. How to handle regional inequalities which are only increased by the activities of multinationals? These and other questions (including the need of reducing vulnerability) show that there are no clear answers to the problems caused by the processes we analyzed in this paper. It is now evident that the linkages between economic development and FDI are very strong, and we hope that policy makers will find the right approach to the problems through a coherent foreign economic strategy. Perhaps this review helped them in some extent.

References

Arthur, W. Brian [1989]: „Competing Technologies, Increasing Returns, and Lock-in by Historical Events." In: *The Economic Journal*. December.

Chandler, Alfred D. Jr. [1990]: *Scale and Scope: The Dynamics of Industrial Capitalism*. Harvard University Press. Cambridge.

Dunning, John H. [1993]: *Multinational Enterprises and the Global Economy*. Addison-Wesley. New York.

Hilferding, Rudolf [1955]: *Das Finanzkapital*. Dietz Verlag. Berlin.

Hymer, Stephen H. [1976]: The International Operations of National Firms: A Study of Direct Foreign Investment. Cambridge. MIT.

Kornai János [1993]: A szocialista rendszer. Kritikai politikai gazdaságtan. HVG Kiadó. Budapest.

KSH [web]: Központi Statisztikai Hivatal. http://www.ksh.hu.

MNB [web]: Magyar Nemzeti Bank. http://www.mnb.hu.

Székely-Doby András [2006]: „Vernon és a számítógép. Az információs-technológiai forradalom és a termékciklus-hipotézis összefüggései." In: *Közgazdasági Szemle*. 2006/9.

Túry Gábor [2005]: "One year on EU accession. Central Europe and Brussels". Presentation at *The International Conference on The Economic and Political Context of Central Europe*. Bratislava on June 14.

Vernon, Raymond [1966]: „International Investment and International Trade in the Product Cycle." In: *Quarterly Journal of Economics*. May.

Wilkins, Mira [1970]: The Emergence of Multinational Enterprise: American Business Abroad from the Colonial Era to 1914. Harvard University Press. Cambridge.

Wilkins, Mira [1974]: The Maturing of Multinational Enterprise: American Business Abroad from 1914 to 1970. Harvard University Press. Cambridge.

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CHANGING NATIONAL INNOVATION SYSTEMS IN ADVANCED ECONOMIES – LESSONS FOR CATCHING-UP FOLLOWER COUNTRIES

This paper presents the results of a research project undertaken at the Institute for World Economics that focused on changes and institutional innovations in advanced economies' National Innovation Systems. These changes were provoked either by emerging new technologies or by changes in the outside environment that made the reform and the transformation of the institutional system necessary. We tried to identify the factors that provoked changes in the system, as well as the direction of these changes (whether different countries have carried out identical or similar changes). We also investigated the methods, the changes have been accomplished.
The three topics surveyed are the following: institutional centralization; innovation financing; and demand-oriented innovation policy as a complement to the usual supply oriented analyses.
JEL: O31; O32

Economists whose field of specialization is innovation and the economics of technical change as well as economists doing research on competitiveness share a consensus view, namely that the quality of National Innovation Systems (NIS) i.e. the tightness of the linkages, the effectiveness of the system's functioning, the economic embeddedness of the system etc. is one of the most important determinants of a country's competitiveness. The features of the technological development path as well as the actual technological achievements are determined by the quality of the institutions rather than by the amount of money dedicated to R&D, or the innovativeness of a country's engineers.
This consensus view is well demonstrated by a new concept that has quickly spread in economic analyses. Similarly to the term of "revealed comparative advantages" analysts tend to utilize the term revealed institutional advantages in competitiveness analyses[2]. Some researchers compare the various countries' innovation systems with a benchmarking approach and try to establish country ranks in this respect[3].

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[2] Hall, P.A. – Soskice, D.W. [2001]: Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. Oxford, Oxford University Press
[3] See: Porter, M.E. – Stern, S. [2002]: National innovative capacity. In: World Economic Forum. The Global Competitiveness Report 2001–2002. Oxford University Press, NewYork; and European Commission [2002]: Towards a European Research Area. Science, Technology and Innovation. Key Figures 2002, http://www.innovating-regions.org/download/Towards_a_ERA_-_key_figures_2002.pdf

As for the benchmarking methodology, comparing international best practices usually leads to useful and thought-provoking lessons nevertheless it conceals an important fact. National innovation systems are not static institutional arrangements. They are and remain effective if, and only if their institutional composition, as well as the functioning of their individual elements, their incentive systems etc. keep changing as a flexible reaction to changes in the outside environment. The process of change is more complex it cannot be simply described and explained with the well-known phenomena that new priorities emerge, or that new technologies require new institutions. National institutional systems are always related to other economic and social systems like the production system, the regulation system, the financial system etc. In a textbook case, these systems – being tightly related – keep changing at a more or less parallel pace. In the case of co-evolution of technology and institutions complementarities among individual institutional systems generate positive externalities.

Nevertheless, it is more frequent that changes in the outside environment affect individual systems differently. The speed of their reaction to these changes, the speed of their transformation is not uniform, thus the development of one system lags behind that of the other.[4] This hinders the productivity and competitiveness increasing potential of the faster changing, more flexible system. National innovation systems act as "mediators" facilitating the spillover of systemic changes (from one economic or social system of the economy to the other).

Let me give some example to parallel development and also to the case when the development of one economic and/or social system lags behind that of the other. An example to more or less parallel development is the transformation (the greening) of the production technology in the chemical industry parallel to changes in the societies' increasing awareness of environmental values as well as to changes in the countries regulation system, with regulations becoming ever stricter. Another example to the parallel development of technology, institutions and the regulation is the changes in the American system of National Accounts as well as in its generally accepted accounting principles, parallel to the increasing weight of intangible assets both in corporations' investments and in the value creation process. Of course measuring and valuation has not changed yet in all the countries where intellectual capital has gained weight. This makes international productivity comparisons as well as the comparison of other indicators like growth, capital intensity etc. quite difficult and distorts individual national accounts as well.[5]
An example to the development of the national innovation system and of other economic and social systems lagging behind the development of the technology is provided by countries where information technology revolution has produced transformations only in selected systems. Some countries may actively participate in the production of ICT hardware, they may also use ICT in manufacturing and services, but as far as the transformation of social systems induced by information technology revolution are concerned (e-work, e-government, e-learning etc.) they are lagging much behind in this respect. These lags can partially be explained with the relative underdevelopment of the national innovation system.

[4] Freeman [1987] argues that technological change is often very rapid but there is much inertia concerning change in social institutions. Kodama [1995] on the other hand lists many examples of the co-evolution of technology and institutions. (Freeman, C. [1987]: Technology Policy and Economic Performance. London, Pinter Publishers; Kodama, F. [1995]: Emerging Patterns of Innovation: Sources of Japan's Technological Edge. Harvard Business School Press)

[5] See: Corrado, C.A. – Hulten, C.R. – Sichel, D.E. [2006]: Intangible Capital and Economic Growth. NBER Working Papers, No. 11948

A research project undertaken at the Institute for World Economics has focused on changes in advanced economies' National Innovation Systems, provoked either by emerging new technologies or by changes in the outside environment that made the reform and the transformation of the institutional system necessary. We tried to identify the factors that provoked changes in the system, as well as the direction of these changes (whether different countries have carried out identical or similar changes). We also investigated the methods, the changes have been accomplished.

Note, that the transformation of the institutional system is not an easy process. Even in the case of revealed deficiencies, inefficiencies and crises; and even in the case of decision makers' reform commitment, institutional rigidities[6] may prevent changes from coming into effect or may make them short-lived. An interesting example is the long lasting reform process of Russian state-owned research institutions. In spite of the fact that both analysts, politicians and stakeholders have recognized that the excessive fragmentation of the institutions of the Russian Academy of Sciences (RAS) is a disadvantage that may even undermine the performance of R&D and in spite of stakeholders' successive steps to streamline the institutional structure, the process has not advanced much. In 2003 for example, 45 RAS research institutions were closed but at the same time at least as many new research institutes were opened while some existing ones were separated into legally independent bodies.[7]

Let me end this introduction with a telling example that demonstrates that new technologies require new institutions. The U.S. lead in biotechnology commercialization[8] as well as other phenomena of the 'European paradox' (the gap between basic science /academic research/ and technology commercialization i.e. good performance and spectacular achievements in the former field and failures and relatively minor success in the latter) have inspired other advanced economies to initiate institutional changes. A German research project surveyed the country's NIS to find out which institutional elements are responsible for the European paradox. It turned out that dominant part of basic R&D in Germany is carried out by public sector firms, and research results are considered public goods.

The private appropriation of the results of publicly funded research is illegitimate or at least unethical, these results are considered more or less[9] national inventions. This is in sharp contrast with the U.S system where the mental and behavioral attitude of researchers is shaped by institutions like private universities, venture capital firms, and spin-offs. Entrepreneurship and successful commercialization are not only considered valuable in the U.S. but are also promoted with the help of various incentives. The relative poor commercialization performance of biotechnology research in Germany can be explained with technology-specific factors. Biotechnology is a technology based on tight industry-university

[6] See: North, D. C. [1990]: Institutions, Institutional Change, and Economic Performance. Cambridge: Cambridge University Press

[7] Fostering Public-Private Partnership for Innovation in Russia. Paris, OECD, 2005, (p. 61)

[8] Commercialization performance is measured with the number of patents, new products and/or new technology-based startups.

[9] In the case of Germany, the government was entitled to a varying share of revenues generated from publicly funded research.

cooperation, tight links to basic science. Commercialization – more than in the case of any other previous technologies – is carried out by university spin-offs and by new technology based startup firms. While both the American mentality and the American institutional system are highly suitable for the commercial achievements in the field of biotechnology, the German system and mentality are not.
The discovered German institutional specifics have not caused any problems in the case of the commercialization efforts of innovations in the machinery industry, they became a deficiency only with the emergence of this new technology. Lehrer and Asakawa [2004] provide a detailed description of the institutional and mental change – as well as changes in the incentive system – that followed the results of this survey both in Germany and in Japan that has faced similar problems in the field of biotechnology.[10]
This essay will focus on institutional change in three chapters. Chapter one investigates the issue of institutional centralization – currently a hot issue also in the Hungarian NIS. Chapter two also tackles an evergreen question, that of innovation financing and the reform of innovation financing. Chapter three is about the role of demand factors in promoting innovation – given that innovation (economics and policy) studies are usually supply oriented. Chapter four summarizes.

Institutional centralization – a virtue in itself?

Institutional changes are best understandable for both the politicians and the public if they belong to the category of changes in innovation governance i.e. if they become manifest in centralization or decentralization measures. Therefore the instruments politicians employ to accomplish the objective of switching the economy to an innovation-driven development path are often constrained to changes in the governance of innovation, whereby also some public money is also thought to be saved.
Since the necessity of streamlining the structure of basic research is a hot political issue in Hungary as well, we have surveyed whether advanced economies have also faced any problems concerning the governance of innovation and what their solutions were.
It turned out that OECD recently completed a survey on governance issues and summarized the results in a publication.[11] Lessons from the Dutch and the Austrian case studies were particularly relevant for the Hungarian policy decision-makers.
Initially both in Austria and in the Netherlands the decentralized nature of the innovation system was considered highly valuable. Bottom-up project funding dominated the system with a carefully designed division of influence at regional levels. A high degree of institutional independence and the strong involvement of beneficiaries in the steering of funding agencies reduced the risk of wasting too much money for bad projects as well as the risk of excessive political influence. On the other hand it reduced opportunities for strategic priority setting, and increased

[10] Lehrer, M. – Asakawa, K. [2004]: Rethinking the public sector: idiosyncrasies of biotechnology commercialization as motors of national R&D reform in Germany and Japan. Research Policy, vol. 33, No. 6-7
[11] OECD [2005]: Governance of Innovation Systems. Paris OECD

the risk of duplicate research groups. Besides, OECD experts also noted the fragmentation of efforts and of resources in many research domains.
The Dutch science and research community is practically as fragmented as the Hungarian one. There are 13 universities. 18 research institutes belong to the Royal Netherlands Academy of Arts and Sciences, six research institutes to the National Research Council. Besides there are five large technological institutes, four technological top institutes, and 14 institutes that belong to the Organisation for Applied Scientific Research, as well as a number of state-owned research and advisory centers.[12] The situation is similar in Austria and in Ireland as well, namely that too many institutions are involved in agenda setting and in the allocation of funding, which makes the system fragmented and uncoordinated.
The solution for this perceived problem has been in sharp contrast with the reform proposals, politicians are arguing for in Hungary at least in two respects. Firstly, the measures aimed at streamlining the innovation system in these countries have not targeted *the institutions that carry out research*. They did not try to integrate research performers, close some of them and create large integrated units out of selected, previously independent research institutions. They did not intend to close some research institutes belonging to the Academy of Sciences and integrate the researchers of these institutes into university departments. Streamlining and integration aimed at *reducing the fragmentation of the S&T policy institutions* and creating horizontal bodies[13] for strategic priority setting instead of the strongly departmentalized system.
Secondly, the aim of streamlining the system was always that of increasing competitiveness and the efficiency of research and never that of saving some public money. Therefore reform moves have always coincided with the increase of funding. The introduction of new priorities involved minimal reallocation from existing priorities, instead, new resources have been introduced into the system. This minimalized interest conflicts and ensured a relatively smoother realization of the reform. In contrast to this, reform in Hungary is usually driven ahead by fiscal restrictions adopted before the elaboration of any strategic vision.

Innovation financing

Issues related to innovation financing are rarely investigated using a systemic approach in international academic literature. Instead of analyzing the relation between the financial system and the innovation system, the usual question analyses tackle is whether it is bank-based financing or equity financing that strengthens more efficiently the innovation potential of countries or of specific sectors.
Surveying 17 OECD countries and 20 manufacturing industries, Block [2002] argues that industries characterized by high technological opportunity and a focus on product innovation perform relatively better in financial systems with large and liquid stock markets, while the performance of industries characterized rather by

[12] Boekholt, P. de Hertog, P. [2005]: Shaking Up the Dutch Innovation System: How to Overcome Inertia in Governance. In: OECD [2005.a] pp. 179-217 (p.185)
[13] "Horizontalization" included the creation of the position of a chief scientific officer, or the launching of inter-departmental innovation programs, or central funds for the realization of national strategic innovation priorities etc.

process innovations[14] benefits from a more bank-oriented financial system.[15] Using the dichotomy of radical versus incremental innovations Hall and Soskice (op. cit.) make similar arguments. Industries in the case of which incremental innovations (small-scale improvements of existing product lines or processes) are dominant, fare better in countries where the financial market arrangements are dominated by long-term, credit-based financing, by relational banking. Fast-moving technology sectors with radical innovations benefit more from an institutional framework characterized by equity finance. Formulated according to the concepts of the varieties-of-capitalism literature, fast-moving technology sectors fare better in a market-based, shareholder model of corporate governance. This is well understandable, since the availability of equity financing is critical factor for startups being able to become high-growth companies.

Recognizing this, several countries have adopted systematic policy steps aimed at transforming the financial system in order to improve the given country's innovation and technological performance and to support specific high-technology industries. Information technology revolution and the institutional requirements of the new technological paradigm have motivated many countries characterized by a bank-based institutional framework to adopt measures that would shift their countries' financial systems towards equity-based financing. France for example established a new technology oriented equity market (the so-called Nouveau Marché) in 1996, and developed the venture capital industry.[16] The Finnish financial system – traditionally a system with a strong banking sector similar to Germany and Japan – has also been transformed by the end of the 1990s, similarly to other Nordic countries. From a bank-based system it has turned into a stock-market centered system. Stock market capitalization increased rapidly[17] and foreign institutional investors' started to invest actively in Finnish stocks.[18] Venture capital gained weight, promoted partly by public policy measures.[19] Selected signs of institutional convergence can be discovered in Germany as well, such as the introduction of some Anglo-American style of institutions into the financial markets in the second half of the 1990s, or the increasing role of institutional investors, venture capital

[14] Whether an industry is characterized by product innovations and high technological opportunities or rather by process innovations (and relatively lower technological opportunities) is of course the question of the actual life-cycle position of the given industry.

[15] Block, T.H. [2002]: Financial systems, innovation and economic performance. MERIT Research Memoranda, No. 11

[16] Cieply, S. [2001]: Bridging capital gaps to promote innovation in France. Industry and Innovation, vol. 8, No. 2

[17] Average nominal stock market capitalization was 25 % of GDP in Finland between 1991 and 1995 and it rose to an average of 148 % between 1996 and 2000 (68 % without Nokia). For the sake of comparison: in the second half of the 1990s the respective indicator was 51 % in Germany, 68 % in Japan and 142 % in the U.S. Sweden experienced a similarly spectacular increase of stock market capitalization: from 53 % of GDP in the first half of the 1990s to 124 % in the second half. (Source: Hyytinen–Pajarinen [2001]: Financial systems and venture capital in Nordic countries: A comparative study. ETLA Discussion papers No. 774, p. 14)

[18] More than 90 % of Nokia's (a par excellence Finnish company's) shares are owned by foreign investors!

[19] This process was enhanced also by the banking crisis that followed the rapid liberalization of the system in the 1980s. A lending boom in the second half of the 1980s has quickly led to a massive crisis of the banking system necessitating the government's intervention in the early 1990s. See: Hyytinen, A. – Pajarinen, M. op. cit. and OECD [2005]: Innovation policy and performance. A Cross-Country Comparison. Paris OECD

and investment banking.[20] In 1997 Germany also introduced a special segment of the Frankfurt stock exchange for smaller high growth companies, the so-called Neuer Markt to promote equity finance for startups.

When analyzing the relation between changes in the financial system and innovation performance we investigate two issues here: the effects of the increasing role of venture capital and the role of public-private partnership (PPP) programs in promoting innovation.

The case of the USD 100 million venture capital program of Israel (1993-1997) offers some interesting lessons. This program intended to modify the proportions of public and private innovation financing in a creative manner – note that the BERD/GERD[21] indicator is frequently utilized in international comparisons. Israel managed to increase the share of private financing by strengthening the capitalization of the domestic venture capital industry with public funds. Part of the direct public funding of companies' R&D activity has thus become indirect: some companies, e.g. high-tech research-intensive startups receive funding from venture capital companies, and not from the government, i.e. not from the various departments' funds designated for R&D. The other effect of this step was the increase of the funding of technology-based startup firms at the expense of established R&D performing companies. This move was preceded by a systematic survey of the Israeli industries to identify the most promising ones, bound to become engines of growth and technological upgrading. Information and communication technology sector has been identified: an industry, the development of which is driven by new technology-based startups. The surveys emphasized the necessity of institutional change in innovation financing in order to develop this industry. This has led to the described measures of the development of the venture capital industry that focused on new technology-based startups and to the resulting shifts in the BERD/GERD indicator and in the share of startups from overall R&D funding.[22]

The public promotion of venture capital in order to promote new technology-based startups was a highly successful program in Germany as well. Public programs were announced that offered co-investment to, and in some cases provided guarantees for private investment in high-tech sectors. Vitols (op. cit.) reports that with a combination of national and regional programs up to 6 Euros of public money were available to leverage each 1 Euro of private investment in the high-tech sectors.

Another phenomenon of structural and institutional changes in innovation financing is the emergence of PPP programs in this field as well. PPP programs offer complementary resources to innovation financing, but it is not their only advantage. One of their main advantages is that they contribute to the tightening of industry-

[20] Vitols, S. [2005]: Changes in Germany's Bank-Based Financial System: Implications for corporate governance Corporate Governance: An International Review, vol. 13, No. 3

[21] Business Expenditure on Research and Development (BERD) over Government Expenditure on Research and Development (GERD). In advanced economies this indicator is higher than in relatively underdeveloped ones, since in the latter country group business enterprises perform relatively little research, most of the expenditure on R&D programs is financed by public funds.

[22] Avnimelech, G. – Teubal, M. [2005]: Evolutionary Innovation and High-Tech Policy: What Can We Learn From Israel's Targeting of Venture Capital? Paper presented at DRUID 10th Anniversary Summer Conference.

university relations and to the increase of the share of project financing at the expense of institution-financing (block grants) within total innovation financing.
Two short comments are to be made here.
Firstly, project financing versus institutional block grants is not an „either or" question, rather a question of proportions. We cannot claim that in advanced economies competitive project financing predominates or that it is much higher than institution financing. The share of institutional funding in the total income of Czech public research institutions was 41.7 % in 2000, whereas in Finland the respective indicator was 43 %. In the UK universities, institutional funding amounted to 34.8 % of total research funds.[23] For Hungarian research institutes it is particularly instructive that the United Kingdom managed to introduce performance-based criteria for institutional funding. Funds are allocated to research institutions not on the basis of base-year arrangements (inflation adjusted automatic funding) but based on the periodic assessment (peer review) of their strengths. Institutions compete with each other for receiving from a predetermined national amount designated each year for research funding. Like international football teams, they try to hire star researchers, they promise better remuneration for the researcher than he/she actually receives in order to improve the publication record of the institute.[24]
The second comment is related to PPPs' industry-university linkage building effect. PPPs' other beneficial effect is that in this way industry representatives can easier abandon their traditional deeply-rooted belief, which in reality is a myth, that public research institutes' services (especially in the field of social sciences) are free of charge, involving no costs.
Possible PPPs to be introduced in relatively underdeveloped economies include private companies increasing commitment in the development of education curricula and in human resource accumulation which may be manifest in various scholarship and fellowship and research programs aimed at students and lecturers of tertiary educational institutions.
PPPs contribute to demand creation for new technologies (see next chapter). They constitute a cost-effective method of supporting private companies' research efforts and offer more efficient evaluation and monitoring than it is usually the case in purely publicly funded research programs. Governments' role is the identification of programs and potential participants, the elaboration of the incentive framework, the managing of the competitive selection process, monitoring and evaluation (together with the private participants).

Demand-oriented innovation policy

International NIS research has for a long time laid emphasis mostly on supply factors that influence the performance of the system. While innovation economics identifies demand pull factors as well as supply push (technological opportunity driven) elements among the sources of technical change (note that the relative importance of these has long been debated[25]) innovation policy studies and NIS

[23] Source: Governance of Public Research. Toward Better Practices. Paris, OECD, 2003 p. 85
[24] Source: Governance (op. cit. p. 83), and personal interview with an LSE researcher.
[25] See Cohen, W. [1995]: Empirical Studies of Innovative Activity. In: Stoneman, P. (ed.) [1995]: Handbook of the Economics of Innovation and Technological Change (Blackwell, Oxford UK, Cambridge USA) for literature overview, see also the induced innovation literature e.g. Thirtle, C.G. –

approaches have mostly investigated the policies related to the supply factors of countries' technological and innovation potential. The focus of these studies were factors like education, R&D expenditures, and –institutions, bridging institutions and innovation incentives – as determinants of the learning capability and the innovation potential.

Demand factors have also appeared in these studies in the form of user-producer interactions[26] or in analyses of the role of lead users (in a porterian sense – recall Porter's theses on the competitive advantage of nations[27]). Nevertheless the role of demand factors in promoting innovation, in increasing nations' innovation potential has long been considered as secondary in innovation policy studies.

Recently this situation has changed: innovation policy studies tend to pay increasing attention to demand factors. One reason is that today's technologies, in particular information technology and nanotechnology require users' active participation in innovation activity. To be able to absorb the new technologies, to develop its customized applications requires users' investments in co-invention.[28]

Another reason for the increasing recognition of the role of demand in innovation generation is the structural change in the organization of value creation activities. While in the past, most firms used to integrate research and development with other corporate activities (production, marketing, distribution etc.), nowadays, the number of research and development alliances, licensing deals as well as other types of R&D outsourcing arrangements increases at a tremendous pace. A global market for technology has emerged opening new windows of opportunity for selected catching-up economies.[29] This in itself is an issue of utmost importance for innovation and technology policy decision-makers, since differences in the intensity and efficiency of co-invention can in itself partially explain why the rate of technical progress varies among follower countries with identical opportunities to adopt and absorb the new technologies.

The value of individual new technologies differs for the users depending on the costs of adoption, i.e. on the costs and the efficiency of co-invention. If adequate institutions exist that elaborate sophisticated incentives to contribute to the successful adoption of new technologies they may accelerate technological catching-up. If these institutions and incentives are lacking, the probability of falling behind i.e. the probability of technological polarization increases.

One of the main demand-side instruments of innovation policy is public technology procurement. With this instrument policy makers can in principle strengthen domestic entrepreneurship, support domestic firms' innovation activity by reducing the risks of innovation. The strengthening of the "national competitiveness" is however not automatic even if public procurement favors domestic firms. There is ample empirical evidence that national champions are bought up by foreign

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Ruttan, V. W. [2002]: Role of Demand and Supply in the Generation and Diffusion of Technical Change. Routledge.

[26] Lundvall, B.A. [1988]: Innovation as an interactive process: from user–producer interaction to the national system of innovation. In: Dosi,G. – Freeman, C. – Nelson, R. – Silverberg, G. – Soete, L. (eds) Technical change and economic theory. Pinter, London, pp 349–369

[27] Porter M. E. [1990]: The Competitive Advantage of Nations. The Free Press, New York

[28] Bresnahan, T. – Greenstein, S. [2001]: The economic contribution of information technology: towards comparative and user studies. Journal of Evolutionary Economics, vol. 11, No. 1

[29] Arora, A. – Fosfuri, A. – Gambardella, A. [2004]: Markets for Technology: The Economics of Innovation and Corporate Strategy. MIT Press

companies, as it happened in the case of the Italian Fiat Ferroviaria, the developer of the Italian high-speed train or in the case of the Swedish Asea in the same industry. The former was bought by the French Alstom, the latter by the German AdTranz. National competitiveness increases as a result of public technology procurement actions only in case national champions' new products acquire export markets as well not only the domestic one. If this is not the case, developmental public procurement contributes only to the domestic diffusion of the newly developed technology. However, the costs of this exercise will be far higher and the process far slower than in the case of purchasing an existing technology at world markets.

Korea chose a hybrid solution when it bought the technology of the French TGV but made it develop further by Korean engineers. In 2004 there were 46 rapid trains in Korea, twelve of which built by the French Alstom and the others were developed by a Korean company. China also chose a similar solution, importing a turnkey project from Siemens and for another track from the Japanese Kawasaki Heavy Industries. Chinese engineers modified and further developed both versions and now a high speed train manufacturing company in Qing-Tao operates at full capacity to serve the future rail tracks that are presently in construction.[30]

We can draw the conclusion that in the case of large turnkey projects like the one of high speed rail construction, the optimal public procurement policy for follower countries is the purchase of existing technology and the promotion of its adaptive development through incremental innovations by local engineers and local firms. This may more effectively contribute to learning and to national competitiveness increase than the financing of the development of the national solution.

Of course, the choice of an optimal public procurement policy is technology-specific. The promotion of national champions through public technology procurement is far more promising in the case of software development or other activities necessitating high intangible and relatively little tangible capital.

Summary

„When geographical shifts occur in world industrial strengths" and new countries take the top positions in the rank of industrial leaders, the explanation of this process is usually the creation of new institutions (institutional innovations) by the newcomers – writes Kodama (op. cit. p. 2). Analyzing the factors behind Japanese success Kodama formulates an interesting research question. His question is whether shifts in individual countries' competitive position is caused by institutional innovations or by the fact that the specific new technological paradigms that emerged as a result of technological breakthroughs fit some socio-economic systems, while other technological paradigms favor other socio-economic systems? The answer is of course both.

Technological opportunities change over time. Some countries' technological specialization may happily coincide with the highest actual opportunities and their institutional structure with the requirements of the actual technological paradigm. In this case their technological and economic performance improves rapidly. Nevertheless, as Vertova found as a result of her historical investigation of advanced economies' technological specialization, there is no single country even

[30] Source: Wikipedia High speed rail (http://en.wikipedia.org/wiki/High-speed_rail)

among the advanced ones either, the technological specialization of which would always coincide with the actual paradigms.[31] In case there is a mismatch between the institutional setup and the requirements of the actual technological paradigm state intervention and the adjustment of the institutional setup becomes indispensable. The more efficient this intervention is and the more flexibly institutions react, the more probable is that the technological performance and the innovation potential of the country improves, so that it can maintain or even strengthen its world economic position.

[31] Vertova, G. [2001]: National technological specialisation and the highest technological opportunities historically. Technovation, vol. 21, No.9

Икономически изследвания
Година XVI, 2007, 1

Rossitsa Chobanova[1]

INNOVATION PERFORMANCE AND CHALLENGES TO THE BULGARIAN INNOVATION POLICY

Innovation is the main driver of knowledge based growth of modern economy. That is why the improvement of innovation performance becomes a core of economic policy.
On the base of benchmarking innovation performance of the Bulgarian economy using the European innovation scoreboard data the paper identifies main challenges to the national innovation policy. Among them are: to foster the overall R&D funding base; to initiate a recovery of R&D in the business enterprise sector; to strengthen the human resource base; to enhance the interactions between the actors of the science, technology and innovation system. In this respect the following questions, concerning innovation policy mix are discussed: What are the main objectives and priorities of R&D policy in the country? Is there a gap between the challenges and the main objectives and priorities? Which policy instruments are in place today aiming at affecting R&D activities in the private and in the public sector? What are the instruments outside the R&D domain which are of particular relevance to R&D activities and the development of R&D expenditures? Is there a gap between the main policy objectives and priorities, and the instruments in place? What are the most important policy instruments that affect R&D expenditures? How does the governance of the system of R&D policy instruments take place, and is there a form of co-ordination between R&D policy and policy instruments from outside the R&D domain? Is there any evidence for interactions among the policy instruments in place with respect to affect R&D expenditure?
JEL: 025, 038,052

1. Innovation Performance of the Bulgarian Economy

The innovation performance of the Bulgarian economy relative to the average of European Union countries innovative performance is not satisfying. Based on the Summary Innovation Index, Bulgaria ranks in 26th place out of 33 countries. Improving the innovation performance becomes crucial problem in the process of the European economic integration. For identification of the challenges to the innovation policy the European trend chart methodology (2005)[2], is appropriate to be applied. This methodology was created as a practical tool for development of a policy towards European strategy, defined in Lisbon, 2000. In the frame of this methodology indicators are grouped in five categories according to the understanding for the key characteristics of innovation not as a lineal, but as a complex process. These categories of indicators are as follow:

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[2] www.cordis.lu/trendchart. There are tree stages in development of this methodology – 2001, 2003 and 2005.

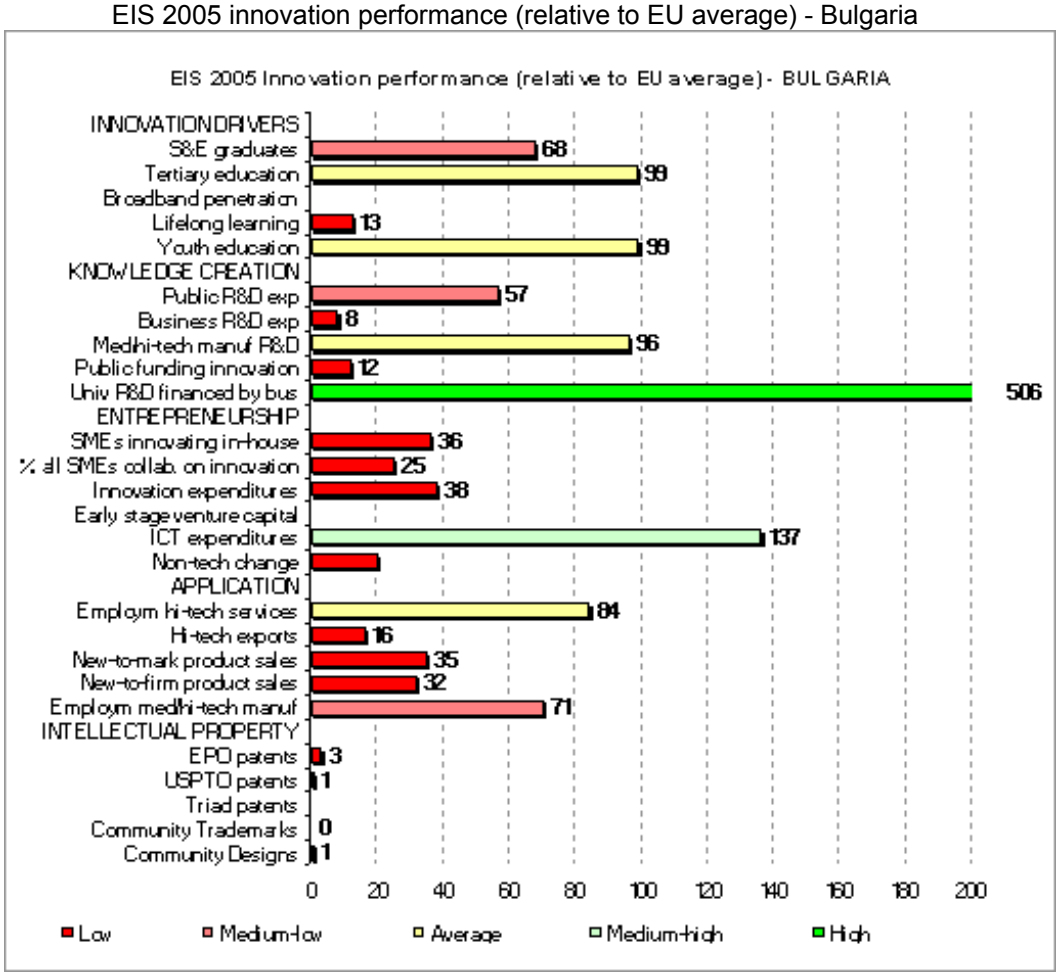
- Innovation drivers;
- Knowledge creation;
- Entrepreneurship;
- Application;
- Intellectual property.

This methodology positions science, technology and innovation indicators as indicators for input and output performance. The innovation input is constructed by sixteen indicators, grouped in three groups: innovation drivers, knowledge creation and entrepreneurship. The innovation output is constructed by ten indicators, grouped in two groups: application and intellectual property indicators.

On the base of the European trend chart 2005 methodology and data presented in the Fig. 1 further an evaluation of the innovation input and output performance of the country is presented.

Figure 1

EIS 2005 innovation performance (relative to EU average) - Bulgaria



Source: EIS 2005

1.1. Innovation input performance of the Bulgarian economy

The evaluation of the *innovation drivers* which characterize the structural conditions for innovation is possible to be presented for 4 of 5 European innovation scoreboard (EIS) indicators. Comparatively good is country performance according to population with tertiary education - the share of the population with M.A. degree for the age group 25-64 for 2004. Its level of 21.7% is 99% relative to EU average. The equal (99% of EU average) is the innovation potential of the country according to the youth education attainment level. The share of the population in the age group of 20-24 with secondary degree of education is 76%. Considerably lower is the country innovation potential according to the level of the science and engineering (S&E) graduates in the age group 20-29. It is 8.3 % in 2003 and performs 68% of the EU-average level. On the extremely low level is the share of the population of the age group 25 - 64 participating in the long-life learning – only 1.3%, which is 13% of the EU average.

Knowledge creation performs low level of innovation input in Bulgarian economy. It is evaluated as: level of public and business research and development (R&D); investment share of medium and high technology investment in R&D and as enterprises receiving public funding.

The public investments for R&D are insufficient. The R&D expenditures are only 0.39% of the GDP in 2003. This level is a result of stable tendency of a slow decline - from a level of 70% of EU – average in 1998, in 2003 the level of the public R&D becomes 57%. Even more unfavorable are conditions for knowledge creation, which depend on the business. The share of business R&D in GDP is 0.1, which is 8% of the EU-average. Approximately well Bulgarian economy is performed in respect to the share of R&D in medium and high-technology sectors – 85.9% in 2002, which is 96% of the EU – average. But this level does not mean that the innovation input is on high level in the country as the total R&D expenditures are on very low level. This fact has to be taken into account in commenting the high level of the business R&D investments in universities - 33.2%, which is 16 times higher then the EU level. In addition it has to be considered that the level of the total business expenditures for R&D as share of GDP is very low – only 8% of the EU - average.Very low is the share of enterprises, receiving public funding – 1%, which is only 12% of EU - average.

The *entrepreneurial input* is an important microeconomic characteristic of the innovation performance, but it is on very low level, taking into account available data for Bulgaria. The level of innovating in house Bulgaria SMEs is 36% relative to EU average. Only 2.3% of the SMEs cooperate for the purposes of reaching innovation output with others, which is 25% of the EU-average. Innovation expenditures are on the level of 38% of the EU – average. Only the level of information and communication expenditures is higher then EU – average – 137%. The SMEs using non technical change are 8.5%, for 2004 which is only 20% relative to EU – average.

1.2. Innovation output performance

The innovation output summarizes the evaluation of the innovation from the point of view of the application of new knowledge and intellectual property development.

The share of the employment in hi-tech services - 2.69%, as an innovation output is on a good level (84%) relative to EU – average. The share of the medium and high tech sectors is 4.66% of total, which is 71% of the EU- average. But the sales of the new to the market products as a share of the total is only 2.1%, which is only 35% relative to the EU – average. The sales of the new to the firm, but not to the market products are only 3.8%, which is 32% of the EU average. Unfavorable is the country performance according to the hi-tech export. Its share in the total export is only 2.9%, which is 16% of the EU average.

Very weak is the country innovation output performance in *intellectual property* development. The share of the new registered with European patent office Bulgarian patents for 1 billion of population is 3.7, which is 3% relative to the EU average. The share of the new registered with USPTO patents for 1 billion of population is 0.8, which is 1% of the EU – average. The registered new community trade marks on 1 billion of the population is 0.8, which is 0% of EU average, and Bulgarian new community designs on 1 billion of the population is 0.9, which is 1% relative to EU – average.

It could be assumed that Bulgaria is not well performed according to the levels and transformation of innovation input into innovation output. This state of the art defines the necessity of developing national innovation system capacity in order to overcome the unsatisfied innovation performance.

2. National innovation policy challenges

National strategy documents and mechanisms for innovation policy delivery have been elaborated, but nevertheless actual policy delivery and the provision of adequate resources remains relatively poor in Bulgaria. Hence, the measures proposed in strategy documents and draft laws are “either lacking the necessary resources or do is not supported by enough political will in the legislative process”.

Based on the review of national studies on the Bulgarian science, technology and innovation development, ERAWATCH country reports and the trendchart reports, at present the 4 main challenges for the National Innovation system of Bulgaria with respect to R&D intensity are as follows:

1. To foster the overall R&D funding base
2. To initiate a recovery of R&D in the business enterprise sector.
3. To strengthen the human resource base of the Bulgarian economy.
4. To enhance the interactions between the actors of the STI system.

CHALLENGE 1: TO FOSTER THE R&D FUNDING BASE

R&D intensity (R&D/GDP) declined heavily after the transformation from a command to free market economy (See Figure 2.). The highest R&D intensity appeared in 1988, when the highest volume of the foreign trade turnover also took place. Figure shows the development of R&D intensity in Bulgaria compared with the EU-15 and the New Member States for the period 1990 – 2002. Until 1996 the dynamics of the R&D intensity is negative, and after that it is more or less stable with variations at levels of 0.5%.

Figure 2

R&D intensity (R&D/GDP) in Bulgaria for the period 1981-2000, %

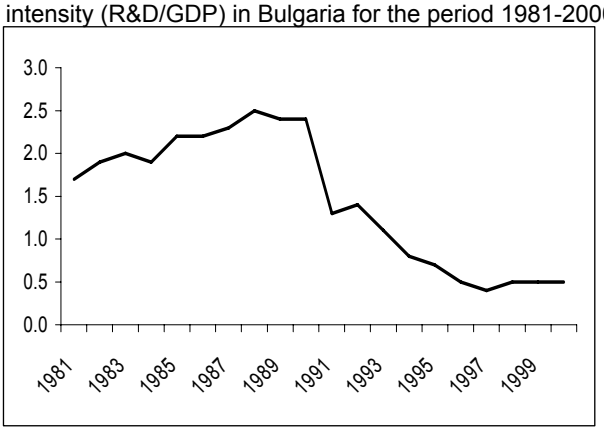
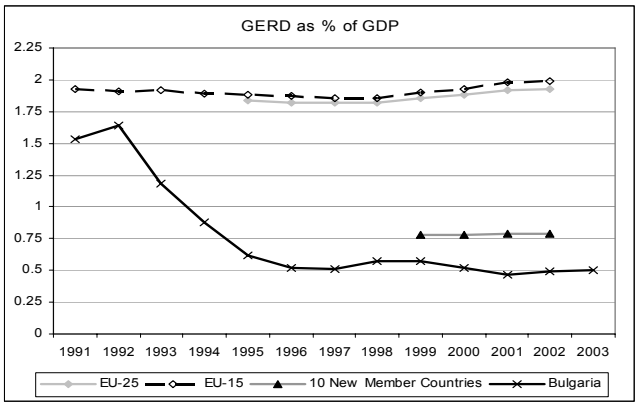


Figure 3

Dynamics of GERD/GDP (1990- 2002)



Source: National Statistical Institute – Bulgaria Eurostat

Table 1 presents a tendency of a slight decline of R&D intensity for the period 1996 till 2002, though an increase in the absolute sum of R&D expenditures appears, which points to the fact that the overall economic growth had a faster pace than R&D recovery.

Table 1

Total Gross Domestic Expenditures on R&D (GERD)

Year	GERD	PPP ($)	GERD as % of GDP	GERD per capita (in PPP$)
1996	9 148 000 (b)	236 850	0,52%	28,3
1997	88 591 000	221 769	0,51%	26,7
1998	127 598 000	258 547	0,57%	31,3
1999	134 449 (b,y)	264 158	0,57%	32,2
2000	131 098	249 386	0,49%	30,5
2001	129 721	235 951	0,44%	29,4
2002	158 327	278 313	0,49%	34,9

PPP: Purchasing power parity, * b – break in series, y - denomination change
Source: Eurostat

It could be concluded that the main instrument for fostering the R&D funding base is to increase foreign demand for domestically based technologies, products and services.

CHALLENGE 2: TO INITIATE A RECOVERY OF R&D IN THE BUSINESS ENTERPRISE SECTOR

But not only R&D intensity declined dramatically, similar to other transition economies also in Bulgaria a shift in the sources of R&D funding along with a change of R&D performance by sectors occurred.

The most striking result in this respect is the collapse of R&D performance in the business enterprise sector. By 1999 its share had dropped by about a factor of three since the early 1990s. The long-term development of business R&D is shown in Figure 4, reinforcing the notion of an especially sharp decline in 1997. As compared with the common tendencies for Central and Eastern European (CEE) transition countries, perhaps the only surprising fact is that the share of business R&D remained at levels of 50% to 60% of GERD until 1996.

As the share of higher education has not changed much and the share of NGOs is negligible, the other side of this coin is the rising share of the state sector in carrying out R&D. A big shift in R&D performance occurred in 1997, when inflation and a redirection of macro policy hit the country and a sharp decline in total R&D expenditures occurred.

Since then, questions concerning the efficacy of relying increasingly on the state sector for pursuing R&D continue to arise, especially as privatisation and marketisation are key policy issues. It is expected, that the drastic decline in business R&D expenditures will have serious consequences for technological accumulation over the longer term.

Table 2

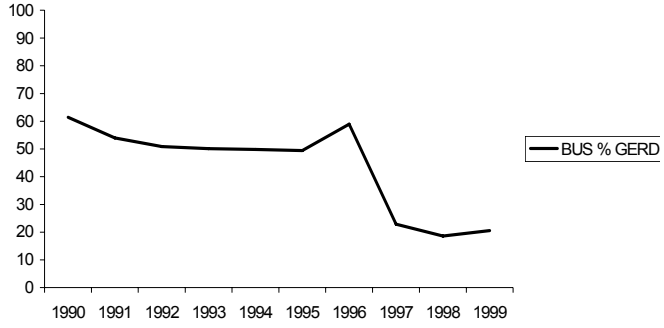
Sources of funds for R&D in Bulgaria

Years	Business Enterprise %		Government %		Higher education %		Private non-profit %		Funds from abroad %	
1996	60,4%	B	35,1%	b	3,8%	B	0,4%	b	0,3%	b
1997	23,3%		67,8%		2,4%		0,9%		5,7%	
1998	23,6%		69,7%		2,7%		0,2%		3,8%	
1999	22,8%	B	69,7%	b	3,2%	b	0,2%	b	4,1%	b
2000	24,4%		69,2%		0,9%		0,3%		5,3%	
2001	27,1%		66,2%		0,7%		0,3%		5,7%	
2002	24,8%		69,8%		0,2%		0,2%		5,0%	

Source: Eurostat, b – break in series

Figure 4

Share of business enterprises performing R&D, Bulgaria, 1990/1999



Source: Calculations by Chobanova, based on unpublished data supplied by the NSI

CHALLENGE 3: TO STRENGTHEN THE HUMAN RESOURCE BASE IN THE ECONOMY

Since 1990 the total number of R&D personnel has declined by a factor of about 6. The data in the table 5 cover the period from 1996 until 2003. In this period the number of total R&D personnel declined by approximately 40%, the number of researchers by about 35%.

Table 3

Human resources in R&D

Year	Total R&D Personnel FTE	Female R&D	Researchers FTE	Female Researchers	Technicians and equivalent staff FTE	Female Technicians	Other supporting staff FTE
1996	26 158	13 788	14 751	6 114	8 169	5 462	3 238
1997	18 625	10 078	11 980	5 431	4 550	3 166	2 095
1998	19 116	10 148	11 972	5 321	4 862	3 295	2 282
1999	16 087	8 374	10 580	4 656	3 829	2 578	1 678
2000	15 259	8 106	9 479	4 354	3 833	2 441	1 947
2001	14 949	7 907	9 217	4 247	3 786	2 355	1 946
2002	15 029	8 106	9 223	4 353	3 713	2 374	2 093
2003	15 453	...	9 589	...	...	...	...

Source: EUROSTAT

The full time employed R&D personnel is 15 453 in 2003. Women represent approximately half of the total R&D personnel, taking a higher share in technicians and equivalent and supporting staff than in researchers. The decline of the human resources in S&T in Bulgaria is confirmed by table 3 also.

There is a very strong process of brain drain from the R&D sector in Bulgaria. A lack of a clear strategy for transformation of the Bulgarian S&T sector and its European and international integration has especially affected adversely higher educated and skilled personnel. Since 1992-1993 the share of Bulgarian higher educated (HE) emigration has started to increase. The major factor motivating this emigration is a higher living standard and possibilities for better professional and personal realization abroad. Better social relations are another important factor affecting this tendency.

A first survey on emigration (1991)[3], covering the beginning of the transformation period, shows that the main direction of Bulgarian HE emigration is Europe – mainly Germany, but the second one, covering the period of 1995/1996 shows that the USA have become the main direction for HE emigration. Furthermore an increasing share of young people emigrating characterises Bulgarian emigration.

According to a feasibility study on the immigration of higher educated people, immigrant flows are to be neglected comparatively to the emigration phenomenon and mainly connected with personal reasons. The country lost one small town of 55-60 000 of its higher educated and skilled population each year during the last decade. However, a lack of data availability is burdening the detailed analysis of this process. In this respect it is extremely important to launch a survey on this topic in order to collect much more facts on flows.

[3] COST project (1997), Brain drain from Central and Eastern Europe; Калчев, Й. (2001) Външната миграция на населението в България, Дунав Прес АД.

Table 4

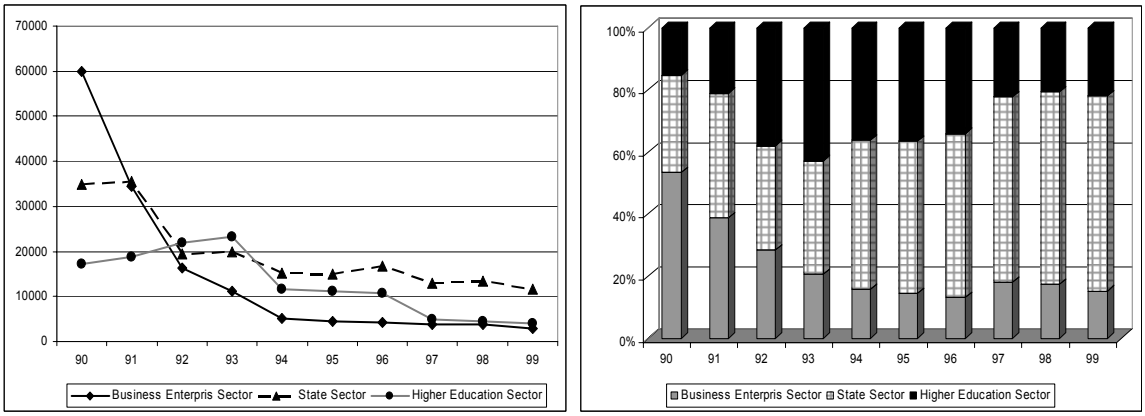
Human resources in R&D - indicators

Years	*Researchers (FTE) per million inhabitants*	*Technicians (FTE) per million inhabitants*	*Total Personnel % Female*	*R&D Researchers (FTE) % Female*
1996	1 765	978	52,7%	41,4%
1997	1 441	547	54,1%	45,3%
1998	1 450	589	53,1%	44,4%
1999	1 289	466	52,1%	44,0%
2000	1 160	469	53,1%	45,9%
2001	1 149	472	52,9%	46,1%
2002	1 158	466	53,9%	47,2%

Source: Eurostat

Figure 5

R&D personnel by performance sectors (levels and shares of total)



Source: Calculations by Chobanova, based on unpublished data supplied by the National Statistical Institute.

The absolute numbers show a very sharp drop in personnel in business-enterprise R&D until 1994, then a slower decline. Personnel in government R&D also dropped but less sharply, mostly in 1992. Personnel in the higher-education sector rose somewhat until 1993, but then fell very sharply until about 1997. The right panel of the Figure shows proportions in each of these performing sectors. It is clear the solvent demand for tacit knowledge is lower then the existing supply.

CHALLENGE 4: TO ENHANCE THE INTERACTIONS BETWEEN THE DIFFERENT ACTORS OF THE STI SYSTEM

The Bulgarian STI system has a well-developed STI institutional system but with not enough mature interactions between the state/higher education R&D system and the business sector in Bulgaria. This hampers speeding the innovation processes in the country.

As stated in the Trendchart report, the innovation governance system is currently better developed in terms of structure, better established in terms of legislation and better coordinated than it was just a few years ago. Nevertheless, there are still weak horizontal and coordinational mechanisms between the main NIS institutions on central level.

Challenges both for policy and economic actors in the present situation and in the future could be summarised as follow:

- Increasing internal demand for domestic R&D activities and outcomes, mainly the business demand
- Increasing foreign demand for domestic R&D activities and outcomes
- Increasing the quality of R&D potential and quantity of R&D personnel
- Fostering domestic and international innovation networks alignment
- Increasing R&D in industry.

In this respect the definition of the priority dimensions for public support for research and innovation projects based on precise definition of the state of the art and tendencies of demand and supply of knowledge in a country is a problem of increasing significance.

The institutions play a basic role for meeting the innovation policy challenges. The main Bulgarian institutions in the field of innovation remain quite stable and there is a clear division of responsibilities between them according to the Trendchart report. Table 1 displays the results of the SWOT analysis of the Bulgarian innovation system as performed in the Trendchart 2005 report.

Table 1

SWOT Table of the Bulgarian Innovation system

Strengths	**Weaknesses**
• Adequate network of institutions; • National Innovation Strategy in place; • Progress in implementing measures set in the Strategy (National Innovation Fund started in March 2005); • Involvement of main stakeholders in policy making and policy consultation; • Evaluation process for internationally financed projects.	• Weak horizontal links and coordination mechanisms between the main NIGS institutions on central level; • Slow implementation of measures in National Innovation Strategy because of insufficient resources; • Involvement of stakeholders rather formal; • Lack of stakeholder Involvement in delivering measures; • Lack of political will to encourage venture capital enterprises; • Evaluation process is not systematic and transparent; • Slow legislative process; • Slow implementation of the positive measures set in the laws and in National Innovation Strategy; • Lack of vertical coordination between central and local priorities (and especially in innovation).
Opportunities	**Threats**
• Improved efforts for communication between stakeholders; • Debate on 0% corporate profit tax rate on reinvestment of profit and on flat tax introduction going on; • Some demand side measures in place (faster depreciation for PCs and software); • Pilot foresight initiatives launched by NGOs.	• No policy to foster high-tech employment; • Further delay in delivering regional innovation strategy initiatives; • Further delay in PPP rules and regulations adoption, which delays stakeholder involvement on delivery level.

Source: Trendchart Report Bulgaria 2004-2005

It could be assumed that the proper answer to the question whether the challenges to innovation policy will meet adequate reaction from the nationals innovation system depends on the objectives and priorities of the national research and development (R&D) policy.

1. Objectives and priorities of R&D policy

The objectives and priorities of R&D policy are defined in several official documents. The Law on stimulating R&D activities, which has passed the Parliament in October 2003, declares the R&D is a national priority and that they have strategic influence to the country's development. In September 2004 the Government has approved the strategy for science, technology and innovation. The document is based on comprehensive analysis[4] of the current situation in Bulgaria and expertise of countries with good management practices in the area of innovation.

The National strategy formulates a policy mix, consisting of financial and non-financial measures. Among them are to upgrade the science and technology (S&T) sector; to upgrade existing companies; to generate new knowledge intensive economic activities; financing innovation.

One of the main financial measures to encourage innovation has already been implemented namely National Innovation Fund. It is the first proactive purely innovation related enhancement policy measure in transition history of Bulgaria. Although it is a huge step forward in policy making and implementation its initial 2005 budget of BGN 5 million (euro 2.5 million) is not likely to contribute significantly to the innovation performance of the economy. However, on the positive side, its annual budget is scheduled to increase to about BGN 101 million (euro 50 million) by 2013.

Among the most important innovation policy objectives are:

Encouragement of the employment of young specialists in SMEs;

Cluster development;

Attracting foreign direct investment in R&D activities;

Setting up and encouraging of existing technology parks.

A number of changes were introduced recently to research legislation in Bulgaria, namely in the Law on Trademarks and Geographical symbols (State Gazette, issue 94 from the 25th November 2005), the Law on Copyright and Neighboring Rights (State Gazette, issue 99 from the 9th December 2005) and Law on Genetically modified organisms (State Gazette, issue 99 from the 9th December 2005). Those changes aim at raising the level of harmonization of Bulgarian with European legislation.

In April 2006, the National Strategic Reference framework for the period 2007-2013 was adopted by the Bulgarian government. The Framework identifies the majour tasks for Bulgaria for achieving cohesion with the EU through the use of Structural Funds' assistance and includes tasks for developing the Lisbon strategy in Bulgaria - increasing R&D funding, including business R&D funding, improvement of educational services, increasing the market orientation of research etc.

The National Scientific Fund has announced its updated requirements for participation in its research programmes.

[4] http://www.mi.government.bg/doc_pdf/Position%20Paper%2009%2020002.doc

2. Coherence between national innovation system challenges and R&D objectives and priorities

It could be concluded, that there is well-developed structure for governing Bulgaria's science, technology and innovation development, but nevertheless actual policy delivery and the provision of adequate resources remains relatively poor. More concretely – there is a gap between the R&D development objectives and R&D funding base; between fostering innovation aim and slow recovery of R&D in business enterprises; between strengthening the human R&D resource base in economy objective and level of R&D personnel salaries and of funding R&D activities. The insufficient foreign and domestic solvent demand for domestically based R&D activities and results leads to further decline of their supply.

The National strategy for scientific research for the period 2007-2013 defines as challenge that the 3% Barcelona target has not been taken fully into account by the Government. The few measures it has adopted in this direction are inappropriate and / or ineffective.

It could be concluded that the coherence between national innovation system challenges and research and development objective and priorities is not satisfied.

3. Composition of the policy mix for R&D

The strategy on Science, technology and innovation (STI) outlines numerous actions to be taken to upgrade STI in Bulgaria. The science and technology foundations play a significant role in this respect.

Scientific and educational institutes in Bulgaria are financed directly by the government (input financing). In Bulgaria, input financing gradually is replaced by output financing. Such a system should is designed in general terms while specific instruments (2 research foundations) are set up. The set of priorities and assign projects are defined on the basis of competitions. The foundations invite proposals from scientific institutes and they select the best proposal after which the project is granted.

The *Bulgarian Science Foundation* receives funds from the state with the purpose of performing mainly fundamental scientific research. The evaluation of proposals is based on the quality of such proposals.

The *Bulgarian Innovation Foundation* receives funds from the state with the purpose of performing projects in technological development. The foundation invites proposals from teams of scientific institutes and companies. A condition for granting funds is that the company contributes financially to the project. The selection of projects is based on scientific quality as well as potential utility.

Another action to upgrade S&T sector is development of the scientific or technological institutes that have the potential to compete for R&D projects on the international market and should be equipped with tools for marketing and acquisition. Competence centres are located at universities and encourage and facilitate research-based co-operation between universities and the business sector. The management of each centre is governed by a board, which is jointly appointed by the parties concerned, i.e. the university, the companies and a representative of the National Innovation Council.

The next action to to improve the knowledge base in small companies is development of placement scheme for graduates in small companies. So called

‘placement schemes’ can be found all over Europe, e.g., the UK Teaching Company Scheme and the Dutch KIM scheme. These schemes mostly involve subsidised placement of graduates in existing, non-innovative SMEs. Addressing the mobility of human resources with such placement schemes is one of the most direct ways to improve the knowledge base in industry. It is the preferred policy to improve the knowledge base of small companies that do not have the financial and human resources to perform research and development activities. Moreover, in the case of Bulgaria, such a placement scheme would enhance the demand for highly educated labour, which could serve to put a hold to the ‘brain-drain’ problem.As a concrete action it is suggested to adopt a financial incentive scheme to subsidise the labour costs of the first engineer or scientist in a company smaller than 100 workers by 50% for two years. A placement fund as suggested here will stimulate innovation efforts of small companies and is preferred over giving tax incentives for R&D because tax incentives are not deemed effective for companies that make little or no profit, and R&D expenses have to be pre-financed, which means that reimbursement comes only after the expenses have been made.

The diffusion of the knowledge and innovation in the food and agricultural sector plays an important role in the composition of the policy mix for R&D. The technology transfer mechanisms are a very effective way to enhance innovativeness in farms and companies. To bridge the gap between public sector scientific researchers and entrepreneurs the policy solution throughout Europe has been for many years to strengthen the intermediary infrastructure. In addition to private knowledge, business services and collective public/private initiatives like branch-organisations, public intermediates like regional development agencies and innovation relay centres fulfill an important role in promoting innovation in SMEs. Technology transfer institutions are often established to serve particular branches of industry or industry clusters, hence the name ‘cluster-based diffusion’.

Despite many recent initiatives, the present intermediate innovation infrastructure in Bulgaria is still rather weak. It is proposed to strengthen this intermediate infrastructure, amongst others by establishing Innovation Transfer Institutes that provide (individual and collective) innovation services to (preferably clustered) SMEs with innovation potential. The cluster-platform and clients will contribute financially to the operation at an annually increasing rate. Such institutes should be established with priority in the agricultural and food sector; when more experience is available the need for such institutes in other sectors should be investigated.

The innovation transfer institutes should comprise different public and private actors and should serve to promote innovation in companies and innovative relationships between actors within the cluster. Main tasks of an innovation transfer institute are to: advise companies within the cluster on matters relating to innovation; transfer know how from research and education institutes, either by its own initiative or by specific requests from companies of the cluster; organise demonstration events, workshops, lectures, company-visits etc.; collect know how gaps in the cluster and defines R&D projects to fill these gaps. The Transfer Institute could also be given the task of the international marketing of the cluster activities in order to attract foreign capital or ‘jobbing’ deals from foreign customers. According to the strategy an interesting option would be to develop an Innovation Transfer Institute for the agri-food cluster in the region of Plovdiv, including actors

like the University of Plovdiv, Institute for Horticulture and Canned Foods, the National Agricultural Advisory Service, and others.

A very important direction of acting to upgrade the scientific and technology sector is addressed to the established innovative firms. In order to increase the involvement of innovative companies (which somehow already have a relationship with universities) into the National Innovation System two channels of innovative interaction are important: science-industry relationships and inter-firm relationships. Based on the experience that other firms are the most important external source of innovation it is important to stimulate inter-firm interaction. Moreover, as it is well documented in the literature, innovative relationships are mostly based on informal networking.

The Bulgarian innovation strategy therefore proposes to promote the formation of an Association of Innovating Companies (AIC). An additional advantage of the Association as proposed is that it can function as a communication channel with the government. As 'Good practice' examples the activities of Syntens in the Netherlands, and the Association of Innovative Enterprise - active in the Czech Republic for a number of years now - forming a network of industrial companies, universities, and science and technology parks, are mentioned.

Actions to generate new knowledge intensive economic activities are mainly connected with attracting appropriate foreign investments. The Bulgarian Foreign Investment Agency or BFIA is promoting international companies to invest and produce in Bulgaria with an immediate effect on Bulgaria's Gross Domestic Product. For Bulgaria Foreign Direct Investment (FDI) is also important in relation to innovation.

Although the activities of the BFIA should certainly not be limited to technology driven foreign investments, the emphasis of the Agency should shift into this direction and it should become equipped to act as a professional discussion partner of foreign technology driven companies. BFIA should become equipped with facilities and means to approach foreign technology companies directly and its authority to make contracts with foreign companies should be extended.The aim should be to attract investments in the sphere of production and distribution, as well as in research and development, either through the establishment of private foreign R&D institutes in Bulgaria (cf. the R&D institute of Nokia in Budapest – 2000 people) or through paid research contracts to Bulgarian R&D institutes. BFIA should approach foreign technology driven companies directly by teams of high standing national leaders and technological specialists who know what Bulgaria has to offer.

The issue of Technology Parks has already received considerable attention from the Bulgarian Government and the Phare Programme. Nevertheless, a proposition at this place is indicated, as Technology Parks are an integral part of STI Policy. The establishment of a Technology Park is a difficult issue as many authorities are concerned: the national government, local authorities, universities, the Academy of Science and perhaps others. It takes for all these parties to come to an agreement. The National Council on STI should take responsibility for the establishment of Technology Parks while funding can come from the National Innovation Fund or other sources.

Hence, an analysis of current situation and development of a feasibility study and project plan for a chosen location are intended.

According to the SME Report 2000 (ASME, 2001) the most important barrier to innovation in SMEs in Bulgaria is the lack of financing. There are several initiatives (public and private, national and international) to overcome this problem5, e.g., the programmes of the Encouragement Bank. However, more possibilities for obtaining credits are needed, including special credits for innovative activities. Such credits could in certain cases be used to supplement other financial schemes, such as the one of the EU.The recent initiatives to improve the access to finance for small firms should be evaluated, and improved accordingly. Especially, credits in relation to innovative activities should be enhanced. In this respect the National Innovation Council and its Fund could play a role in the evaluation, coordination, improvement and enlargement of the facilities.

4. Coherence between main policy objectives and priorities, and policy instruments

The Bulgarian research system is heavily influenced by the country' EU accession. It has a direct influence through the successful participation of Bulgarian research organisations in 4^{th}, 5^{th},6^{th} Framework programmes of the EU. Research priorities set at EU level are closely followed in Bulgaria and national research policy documents are often designed to accommodate in the fullest possible way the guideline provided at EU level.

It is expected that in 2007 Bulgaria will have access to EU structural funds, which would boost spending on research infrastructure and creation of intermediary organisations between business and research. The latter is expected to substantially increase the impact of the Bulgarian research system.

The number of nationally specific instruments in place in Bulgaria is very limited and they have not enough potential to cover the gap between challenges, objectives and priorities. The limitation of the set of R&D policy instrument is defined by the Currency Board regulations, being in force since 1997.

An open coordination of national and EU objectives, priorities, and instruments is the main challenge for achievement of higher levels of R&D investments and their efficacy.

5. Policy mix instruments and target groups

The state budget supported Bulgarian Academy of Sciences and National centre for agrarian sciences dominates the Bulgarian research system. Universities, which have been primarily educational institutions in the past, have increasingly embarked on research but still, have limited capacity. The system is primarily based on state budget support. Competitive research programmes though active since 1990, have increased their weight in the system only in pat 2-3 years. Private R&D expenditure is one of the lowest in Europe; while public expenditure is insufficient and spent by the oversized public research sector (e.g. Bulgaria has 43 universities on a population of less then 8 million).

6. Balance within and emergence of new R&D policy mix

The overall contribution of the policy instruments to volume/increase of R&D expenditures in Bulgaria is modest. The volume of R&D expenditures increases

[5] See EC (2001, p.4-6) "CC BEST Report, Volume II, Report on the Candidate Countries' Measures to promote Entrepreneurship and Competitiveness".

constantly. But the R&D intensity since 1997 is of level of 0.5% and, according to the National innovation strategy, it is not planed to increase.
The impact of the national policy instruments to the R&D performers is significant, as the state budget funding performs almost 80% of total.
In 2005/6 there is a significant step ahead toward attracting public attention/attention by policy makers, but still there is a lot to be done. But te importance of policy instruments to increase the volume of public funding involved is still modest.
The main beneficiary of a shift in public funding is SMEs.
The Bulgaria's EU accession plays the most significant role in developing the set of R&D instruments. The set of instruments is framed by the limitations of currency board.
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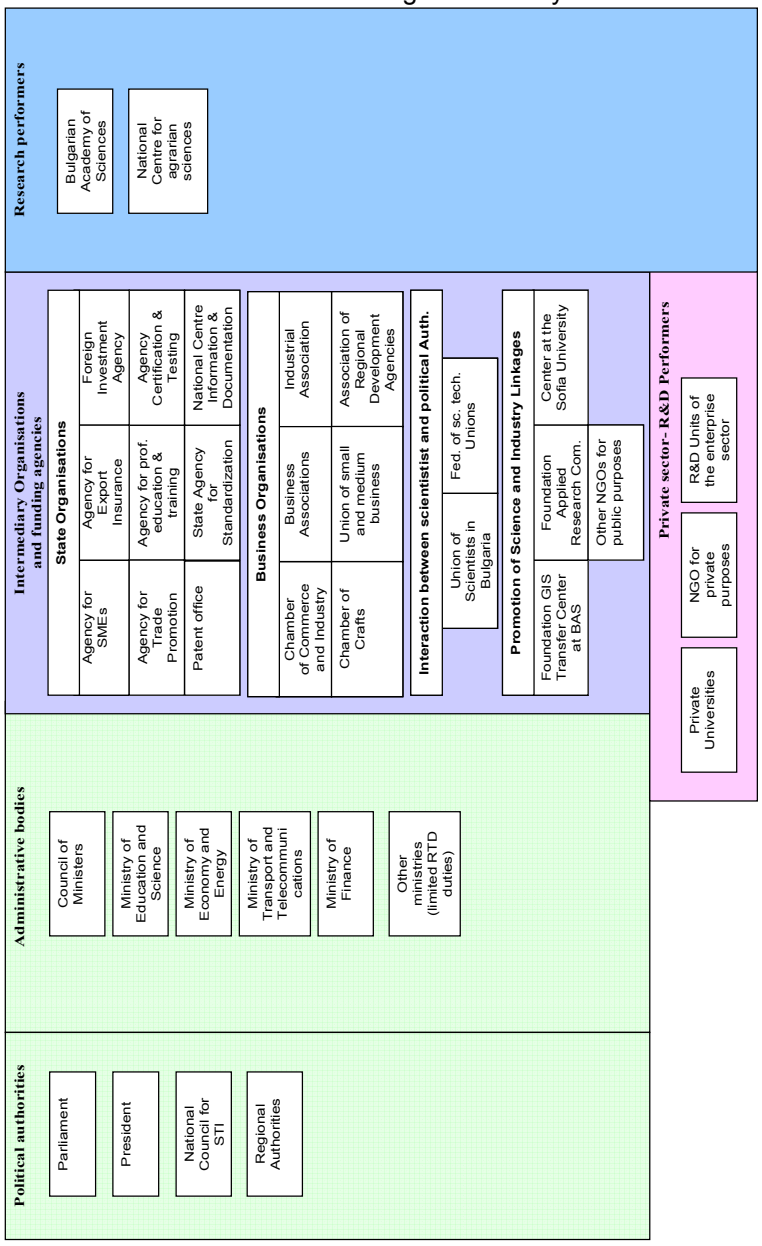
7. Governance of the policy mix and interactions between policy objectives and instruments

The Bulgarian Science and Technology system comprises research performers and policy making entities of the government sector, the research sector, the higher education sector, the business sector and non-profit organisations (See Fig. bellow).
The coordination between R&D policy instruments from outside the R&D domain could be improved. The effectively of their function with respect of the policy mix development is not on the needed level. The Ministry of economy and energy and the Ministry of education and science are the bodies where the gap in the policy system can be addressed, but the coordination between them and other ministries, from where innovation policy mix arrive also still need to be improved.
The policy instruments in place increase the absolute R&D expenditures and change their structure, but have neutral effects to the increase of the R&D intensity.
The interactions between direct and indirect R&D policy instruments are modest and they have not significant influence with respect to affect R&D expenditure.
This statement is valid also for the interactions between financial R&D policy instruments (grants, tax credits etc.) and non-financial R&D measures (IPR, reform of public research, incentives for co-operation, infrastructure provision etc.)

Instruments from other policy domains affect the R&D policy in Bulgaria. The Currency board introduced in 1997 leaded to closure of 36 funds for supporting R&D in specific economic sectors. The financial stabilisation and the average 5% annual growth has developed good environment for increasing R&D expenditures, but the insufficient foreign and domestic demand for domestically based R&D activities neglect the opportunities.

Figure 1

Main Actors of the Bulgarian STI System



NOTE
To: CREST delegations
Subject: "Lessons for R&D policies on the basis of the national reform programmes and the 2006 Progress Reports"
= CREST report on the mutual learning exercise

Delegations will find attached the CREST report on the results of the mutual learning exercise which was carried out during the 311th CREST meeting on 13-14 November 2006. This version of the report has been approved by CREST at the occasion of the 312th meeting on 1 December 2006.

CREST REPORT

LESSONS FOR R&D POLICIES ON THE BASIS OF THE NATIONAL REFORM PROGRAMMES AND THE 2006 PROGRESS REPORTS

INTRODUCTION

The mutual learning exercise of CREST[6], carried out on 13 and 14 November 2006, responded to the request from the Competitiveness Council to make optimal use of CREST as an interface between the research polices of the Union and those of the Member States and as a platform for enriching national policy making through mutual learning informed by the research aspects of the National Reform Programmes[7]. The need for sharing and learning from the wealth of policies contained in the NRPs was further endorsed by the 23 - 24 March Spring European Council.

CREST has been given the task of monitoring the implementation of the Lisbon agenda on R&D, in particular with regard to the Barcelona target of 3% of GDP to be spent on research by 2010.

CREST has built its mutual learning exercise as a complement of the Open Method of Coordination in support of the 3% research investment objective that CREST has already used in three cycles on thematic or horizontal topics over the last years.

The conclusions of this CREST report on mutual learning in research policy come in time for the preparation of the European Commission's Annual Progress Report, due to be tabled on 13 December 2006.

This CREST report will be presented to the Competitiveness Council during the forthcoming German Council Presidency, while the Economic Policy Committee (EPC) is conducting a complementary exercise under the remit of the ECOFIN Council. In its work, the EPC refers to the four areas (R&D and innovation, labour market, energy, better regulation) that the 2006 Spring Council identified as priorities of the Lisbon agenda.

[6] Modus Operandi, Council document CREST 1208/06
[7] Contribution of the Competitiveness Council to the Spring European Council 2006 (Key Issues Paper)

Compared to the very useful, yet more general analysis undertaken by the EPC, the outcome of the CREST mutual learning exercise focused on more detailed information on European research policies and instruments.
The CREST R&D policy learning exercises were organised in five working groups, each with five Member States and two associated or candidate countries. Individual Member States presented their national research policy strategies and instruments, their relationships to Community research policy instruments, as well as issues in research policy governance and future challenges. The experience of individual Member States was reviewed by a discussant, which created a situation facilitating more profound dialogue, sharing and understanding of research policies and instruments among participants.

Conclusions

KEY CHALLENGES IN R&D

On the basis of the National Reform Programmes and the 2006 Progress Reports, CREST has discussed issues that will continue to be highly important in future R&D policy. In the light of this exchange of views, CREST

- **AFFIRMS** that increasing business expenditure on R&D requires a focus on designing a well balanced policy mix in a globalised context. However, there cannot be a general formula on optimal research policy mixes for the Member States because this also depends on linkages with other policies like education, employment and competition; each individual

country will continuously have to carry out tailor-made actions to promote favourable framework conditions for research and innovation in a globalised environment and will have to consider coordinated action with other Member States or at the EU level whenever appropriate. Member States are already using a variety of direct and indirect instruments such as tax credits and other financial mechanisms to foster risk capital and private equity, public-private partnerships, public procurement, cluster policy, training, specific research and innovation programmes etc. The quest for a well balanced *policy-mix* will be a revolving cycle of identifying strategic policy priorities, implementing policy measures, evaluating their impact, and adapting these activities in the light of new challenges.
REINFORCES its call for a coherent strategy in international R&D cooperation. Globalisation, the multilateral relations between the EU and other regions of the world, the role of Europe in international research organisations, neighbourhood policies in Europe, the global mobility of enterprises with regard to knowledge and resources, Member States' bilateral and multilateral relations, trans-border regional research activities, or research projects on a global scale such as ITER, provide ample reasons for an international strategy that puts Europe on an equal footing with its global partners. Within the EU, each Member State should strike a good balance between EU and national and/or regional research policies.
NOTES recent developments in some Member States to foster excellence in human resources and research activities, the latter with a clear focus on strengthening the knowledge base in highly competitive areas, e.g. the service sector, health care, energy supply and efficiency. Together with the European Commission, the Member States are defining the criteria for 'lead market' selection,

aiming to set clear objectives through co-operation with key stakeholders and designing coherence and coordination between relevant policies.

ENCOURAGES the Member States and the European Commission to continue their efforts in bridging the "cultural divide" between science and industry. All countries have already taken a broad range of measures to support inter-sectoral cooperation, e.g. through cluster initiatives, tax credits for contractual research, direct support schemes, specific grants, the exchange of staff, or technology transfer activities. The common denominator of all these policy measures should be to stimulate higher private investment in research and innovation, and to create added value through new partnerships, new financial and intellectual resources, knowledge transfer, and a more market-friendly approach in academic institutions creating more leverage for private research.

RECOGNISES the need for public research organisations to pay more attention to an increasingly competitive and open environment in academic research, education and innovation. Universities and other public research institutions will only be able to react adequately to global competition and the need to commercialise their results if they develop a clear profile of their core competences, critical mass, quality of research training, and a sufficient degree of flexibility to adapt or modify their strategic goals over time.

EMPHASISES that public investment into the R&D system rarely shows immediate effects and these effects are not always tangible. Issues concerning the ability of national research systems to apply increased funding or respond to R&D incentives in an effective way can also arise. Member States will therefore have to carefully consider the *absorptive capacity* of their national innovation systems (and if necessary how best to enhance this factor) when determining their response to meeting the 3% objective.

INVITES the Member States and the European Commission to use their supportive instruments with a view to attracting the best and most talented people in the world to carry out research in Europe. The policy measures already in place need to be thoroughly evaluated with regard to their effectiveness in promoting *brain circulation* on a global market for researchers. Specific attention should be paid to policy measures that would intensify the mutual exchange of researchers between more R&D intensive countries and other CREST Member States as well as between the public and the private sector. Both within and between national innovation systems, further efforts need to be made to create or strengthen policy frameworks for career development of researchers which are coherent, open, flexible and merit based in order to ensure the fullest and most effective participation of talented people from all backgrounds, in particular younger researchers, women, and internationally or inter-sectorally mobile researchers.

UNDERLINES the importance of *setting priorities* in research and innovation policy. Given the budgetary constraints, the great variety of possible thematic focuses, instruments and target groups of specific measures holds the inherent danger of trying to satisfy all needs at once, which can easily lead to fragmentation of the national innovation system and reduced impact. The best way to counteract fragmentation is to set up a coherent policy strategy with clear overall objectives as well as strategic action lines with the appropriate corresponding milestones, resources and responsibility. When setting priorities, it will be crucial for the

acceptance of these policy decisions to involve the scientific community, the business sector and other stakeholders in the decision-making process.
TAKES NOTE of the fact that *Structural Funds* are seen as a powerful instrument for improving regional research and innovation policies, notably in many new Member States, but that other countries are also envisaging a more intensive use of Structural Funds - often for large-scale infrastructure projects. EU programmes and instruments need to be combined with adequate national and/or regional measures in order to unfold their full usefulness as R&D policy measures. The complementary national policies depend on the specific situation of that particular country. The diversity of Member States' technological specialisations and industrial structures and therefore also their research policies implies that the relative importance of EU level policy instruments and programmes differs between Member States. In one country, the Framework Programme may be more relevant, while in another country the Structural Funds are more important for research.
OBSERVES that the set of instruments developed in the context of the European Research Area (e.g. ERA-NET, ERA-NET plus, Article 169 initiatives, Technology Platforms, Joint Technology Initiatives) is increasingly relevant for Member States. The potential effect of these mechanisms will be to enhance the level of coordination and the creation of better competitive advantages for specific technologies by combining the efforts of public and private stakeholders, and the steady development of a more coherent European research policy framework.

GOVERNANCE

Having discussed the requirements for good governance of R&D policy in the National Reform Programmes, CREST
ACKNOWLEDGES the progress that Member States have made in coordinating the Lisbon agenda over the last two years. In research policy, specific internal *coordination mechanisms* in each Member State have proved to be appropriate for the required level of cooperation between politics and administration.
EMPHASISES the *sustained political commitment* that is needed to implement the Lisbon and Barcelona objectives in the field of R&D policy.
INVITES CREST Member States, together with the Commission, to further enhance their efforts to *involve stakeholders and the general public* in the preparation of future "Lisbon" policy measures in R&D. This means both opening up the consultation processes towards all parts of civic society that are potentially affected by new R&D policy actions, and increasing educational efforts, scientific and other relevant expertise.

- **ADVOCATES** an enhanced "evaluation culture" that would further improve the impact and efficiency of research policies. Evaluation is clearly not to be misunderstood as a simple means to criticise certain activities and decision-makers, but it should rather be used as an instrument to improve the efficiency, effectiveness, appropriateness and legitimation of policy measures. In that sense, a genuine evaluation framework would be beneficial to political decision-makers, the implementing administration and, most of all, to the researchers themselves.

USEFULNESS OF THE CREST MUTUAL LEARNING EXERCISE

In the light of the experience gained in the course of the mutual learning exercise, CREST

- **STATES** that the mutual learning exercise proved useful already at the outset since participants had to prepare by studying policy documents from different countries beforehand. Through the Open Method of Coordination, CREST was able to take new expertise on board, thus enhancing the overall quality of the debate.
- **CONFIRMS** the very positive effects the mutual learning exercise offers because it opens up a space for real learning and substantial exchange of views among participants. The exchange of good practice between CREST Member States accelerates the learning curve for all countries as well as for the European Commission. Further information on individual country initiatives that have been considered good practice can be found on the ERAWATCH website.[8]
- **REPORTS** that with all CREST Member States having different economic situations and technological specialisations, these intensive dialogues and interactions between policy makers and/or administrators gave access to important tacit knowledge about research policies and instruments which could not have been acquired at a more general or abstract level.
- **STRESSES** the important role of the 3% objective that became evident in the course of discussions. It can be seen as a mobilising factor rather than a quantitative target for research policy, stimulating peer pressure and consensus, even if some Member States might not be able to achieve this objective in the near future.

OUTLOOK

With a view to future developments in the context of the National Reform Programmes and the use of the Open Method of Coordination in research policy, CREST

RECORDS the key challenges identified through the mutual learning exercise, including the need to further strengthen the European Research Area, regarding them as a reservoir of possible future topics for 3% OMC.

- **CONCLUDES** that it will consider the need for another mutual learning exercise based on the usefulness of its inputs in the overall discussions of NRPs leading up to the Spring European Council. This should take into account the need for more in-depth debate on specific research aspects of the NRPs and the request for an extended time-frame for discussions.

CALLS on the Member States to continue to make *R&D and innovation policy a high priority* in National Reform Programmes beyond 2008, emphasising the key role of research as a generic promoter of growth, competitiveness and social cohesion in Europe in the long term.

[8] In the context of the five sub-groups of the CREST mutual learning exercise a number of good practice examples have been presented. The reports of the sub-groups are available on the CIRCA Net (IG CREST).

Икономически изследвания
Година XVI, 2007, 1

Gábor Túry[1]

REGIONAL DISPARITIES DURING THE TRANSITION: THE NEW SPATIAL STRUCTURE IN HUNGARY

If not in the regional differentiation process of the last one-and-a-half decades then definitely in the area of decisive processes can we can talk about a change. This change generated a new spatial structure, which also indicates a new economic and social spatial structure and a regional restructuring of settlements.

Individual regional development paths determining the new spatial structure display a high degree of regional differentiation in terms of development indicators in individual regions. Growth and decline at macro level determined by economic cycles diverge regionally to a substantial degree, and in some cases these divergences are extreme. Certain regions react more promptly than others to circumstances changed by economic cycles. This is not just due to the different regional dynamics but also to the 'inherited' sectoral structure and the government's development policies. Based on experience in the 1970s and 1980s we come to the conclusion that the mono-cultural production structure shaped by a mono-sectoral development policy implies several risks at regional level, as does supporting investments taking no heed of the amounts or nature of the assistance.

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Regional analyses cannot only be characterised by their use of regional division levels, they also differ in terms of applying different variables. The question is whether we just wish to analyse the regional distribution of a given variable, or make a more complex calculation which takes into account regional development disparities as well. To measure the latter it is advisable to apply several variables collectively because development is a multi-dimensional concept with various indicators.[2] Development comprises the natural and man-made environment, as well as the various indicators of the economy and society. The complexity of the analyses is revealed by the fact that certain dimensions of development can be described by means of several indicators, these dimensions can display parallel movement and exhibit links of varying intensity. The more dimensions and indicators we take into account, the more complex the picture will be. In many cases, we cannot even identify an obvious link between the trend described by regional economic indicators and the level of development at county level;[3] however, applying the multi-variable methodology is justified by the 'change dynamics' of individual variables and the predictability of future processes thanks to the links between them.

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[2] Nemes Nagy (1995).
[3] Sándor (1996).

Regional differences are described by the distribution of economic and social indicators at county level. Economic development is described by the *GDP per capita*, social welfare is described by the *level of income* (the monthly gross average wage of employees), and the unemployment rate. The *gross monthly average wage* is the monthly average including the basic wage comprising personal income tax, the health care and pension contribution and the employees' contribution, as well as other wage elements. In the statistics of gross wages, in addition to the changes in the classification of activities (according to the TEÁOR), there was a change in methodology in 1998, which resulted in companies employing more than four people being covered by the analysis in addition to firms with staff of over 20 people. In our case this does not influence the outcome of the analysis. In 2003 a further change was introduced, which impacted differently on the various counties in the time series of the last year. This change related to the employees of law enforcement agencies. Accordingly, the wages of these employees – formerly accounted for in Budapest – were taken into account at the level of the counties. This mainly resulted in major changes in counties with a rather low employment rate.

The *unemployment rate* data is compiled by the Central Statistical Office according to ILO (International Labour Organization) methodology, and covers the population aged 15–74. Based on the census in 2001, time series were recalculated until 1998, the period prior to 1998 includes data calculated on the basis of the census in 1991. This deviation does not cause any problems in our analysis.

Together with economic and social indicators, we also examine the regional distribution of capital stock. The regional distribution of foreign direct investment is calculated by the county-level aggregation of foreign companies' equity. Foreign company shall mean a company where the foreign partner (as an investor) disposes of at least 10 percent of the ordinary shares or voting rights, or a stake equivalent to this proportion. The equity is calculated in compliance with the provisions of the effective accounting law.

Foreign investment has been measured since 1999 by the National Bank of Hungary and the Central Statistical Office on the basis of a uniform nomenclature. The system is based on the statistics of corporate data, which include data related to ownership shares, credit relations between parent and subsidiary companies and the re-invested earnings based on the profit and loss account and the balance sheet.

Regional GDP/capita, the gross monthly average wage of wage earners and unemployment data are compared to the regional FDI/capita, which is quantified by the correlation coefficient of indicators. To calculate the regional distribution of individual variables we use the weighted relative spread, i.e. the weighted spread data as compared to the average.

Methodological questions

Taking into account the regional *aggregate GDP* used to measure development, several methodological problems arise,[4] which render any calculations based on this indicator uncertain. However, the application of this indicator is justified not

[4] See Dusek (2000) in detail.

only by comparison with other development indicators,[5] but by its (index) role in the European Union support scheme.

When analysing the regional distribution of capital and the spatial differences in regional economic development and growth, we have to take into account the following reservations.

In the course of an acquisition – until the end of the 1990s this mostly meant a privatisation acquisition – the foreign company acquires an existing production verticum, which is defined in regional terms. Therefore, in the case of an individual region, it is misleading to rely only on cumulative data, since if we wish to examine the changes in spatial structures, the investment data gathered after the acquisition is important as it best illustrates the attractiveness of a given area or region as well as its reserves of resources – if we ignore the opportunity of commuting, which would take us too far in our analysis.

The other methodological problem is posed by the spatial location of the production site of given companies, which originates from the permanent changes of the domestic and international economic environment. Decision-making on transforming the investment and production capacities does not take place locally, but at the level of the parent company, with due respect to the optimal production system of the whole group.[6] Investment into a given region, of course, can be influenced by governmental and other instruments as well; however, the selection of the location is only the last step in corporate decision-making.

In the course of the research, the aggregate of the regional distribution was always at county level, the data covers the period between 1994 and 2003. The time series thus cover 10 years, meaning that conclusions can be drawn on regional inequality trends. In the case of other indicators it is impossible or premature to extend the period of analysis. At regional level, there are only estimates with regard to the period prior to 1994.[7] However, as of the mid-1990s we already dispose of data calculated not only nationally but regionally as well. These data allow us to draw a precise picture of the new spatial structure that started to evolve in the mid-1990s.

Regional processes before 1990

It is not possible to divide regional processes into pre-transition and post-transition periods arbitrarily, because the regional differentiation process of the 1970s and 1980s had not come to an end by the transition, and what is more, owing to the economic restructuring which began at the end of the 1980s, economic and social disparities grew further.[8] At the same time, such a division is necessary from a methodological point of view, as economic policy – which indisputably has a regional impact – operated differently during the socialist era than under market conditions. A further consideration is that after the transformation of the political and economic regime the Hungarian economy opened up, which also impacted on regional processes and factors of growth.

[5] Sándor (1996).
[6] Dunning (1985): Multinational Enterprises, Market Structure and International Competitiveness. New York.
[7] See Nemes Nagy (1995, 2001).
[8] Major–Nemes Nagy (1999).

A fundamental problem of economic policy in the socialist era was not only its emphasis on the extensive (production-factor intensive) approach, which gave priority to quantity, but also the lack of any link between economic and regional policy,[9] consequently regional development never played a role in economic policy.[10] The existing regional development policy interfered with regional processes only to a limited degree; therefore, it had a negligible effect.

In the period after 1956, the importance of regions in industrial policy was determined by the decreasing importance of Budapest, the capital. Changes started to take place in the country's spatial structure, the number of industrial workers in the South[11] and North Great Plain[12] and in Southern Transdanubia[13] increased.[14] Industrialisation became the most important instrument of developing backward regions. Nearly all priorities were linked directly or indirectly to industry, more precisely, to the development of heavy industry.[15] Reforms covered extensive industrial development as mentioned above, which could not play a role in regional development and in levelling off differences in various areas because the weighting of industry in the national economy dropped in the 1970s and intensification started.

Figure 1

Public administration structure of Hungary (counties)

In the 1970s the indicators of the regional differentiation of industrialisation began to converge slowly. The spread indices of national income generation per capita in industry and the Hoover inequality indices between 1975 and 1980 started evening out at regional level. However, in the area of labour productivity indices there was a contrasting process underway. Regional disparities grew to such an extent that by the middle of the decade disparities had exceeded the level at the beginning of the

[9] Hováth (1992).
[10] Illés (1992).
[11] South Great Plain: Bács-Kiskun-, Békés-, Csongrád counties
[12] North Great Plain: Hajdú-Bihar-, Jász-Nagykun-Szolnok-, Szabolcs-Szatmár-Bereg counties
[13] Southern Transdanubia: Baranya-, Somogy-, Tolna counties
[14] Klekner (1987).
[15] Kornai (1993).

1970s.[16] The reason was that due to the extensive development the new capacities did not serve the objective of productivity growth but merely production growth. In the 1980s, regional differences started to grow because of the differing intensity in industrial production and the restricted development of rural areas. In addition, the regional division of the society and the economy appears in the multi-level architecture of the centre and the periphery, urban vs. rural areas.[17] In the 1970s, the less industrial areas started to catch up, which is proved by the trebling of the income-generating capacity measured by national income per capita[18], however, the dynamics of development came to a halt in the 1980s, and with this the chances that backward areas with roughly average growth rates had of catching up faded away.

Regional processes after the 90's

The most marked feature of the transition process was the growing inequalities both in social and regional terms. In the period after the change in regime, the differences between regions, counties, micro-regions and settlements became even more accentuated with the dismantling and cessation of production capacities. The full employment maintained artificially by government instruments came to an end and production units were closed down, which rendered a high number of people unemployed, distributed unevenly through the regions. The strengthening of regional differences not only occurred in the area of employment, but in the income level – irrespective of the level of aggregation – with permanent growth between 1988 and 1996, which was rather dynamic at the beginning of the 1990s before dropping by the middle of the decade.

If not in the regional differentiation process of the last one-and-a-half decades then definitely in the area of decisive processes can we can talk about a change. This change generated a new spatial structure,[19] which also indicates a new economic and social spatial structure and a regional restructuring of settlements.

The evolution of the new spatial structure can be divided into two well-defined periods. The *first period* started at the end of the 1980s and finished in the mid-1990s. This was the period of so-called *decline*, which involved the restructuring of production capacities, setbacks in investments, growing unemployment and falling income levels, i.e. the emergence of market conditions.

It is typical of the era that internal resources were insufficient for economic restructuring and they had to be supplemented from external sources. Thus, the strengthening of the private sector took place partly by the intensive involvement of foreign investors. Privatisation by its nature meant the restructuring and rationalisation of capacities. When analysing such a transitional period, it is necessary not only to follow or trace the micro-economic and macro-economic processes precisely, but also to cover the impacts of the transition on regional structures.

In the Hungarian economy after the decline at the beginning of the 1990s, the resources necessary for growth were established by the middle of the decade,

[16] Klekner (1987): p.18.
[17] Nemes Nagy (1987).
[18] Klekner (1987).
[19] Nemes Nagy (2001).

partly due to the investments already completed. This second period is called the *period of renewal*. The most important characteristic of the period is its dynamics, which is crucial with respect to the development path in regions and which also leads to the emergence of the new spatial structure. The previous decline was replaced by different regional growth rates, which characterise regional processes. Growth has become decentralised, in addition to external resources – public investment (primarily infrastructure, communal, etc.), tax and contribution allowances, domestic and foreign capital investment – development is fuelled by the internal resources of the given region.

The characteristics of individual development paths

Regional economic processes and their changes paint a complex picture. The process of economic growth is influenced not only by the favourable regional allocation of external resources but by the advantageous point of departure as well. Not only regional processes in the 1970s and 1980s,[20] but the empirical studies covering the past 15-20 years justify the claim that regions in a favourable starting situation could become the core of regional development.

After the transition, a key element of decentralised development is how the given settlement utilises the internal and external development resources. Certain cities, towns and regions had access to external resources for different reasons, their favourable bargaining positions being one. These external resources not only include public and domestic sources but the intensive presence of foreign investors. A good example illustrating this is Nyíregyháza, which recently has become an outstanding investment and development hub in the region.

Beyond external global economic impacts, the sound management of opportunities is of decisive importance with respect to sustainable long-term development. Regional and rural development based on local economic potential reveals in the medium term that the source of development is the utilisation of exogenous resources determined by endogenous development paths. Otherwise we can be witness to the development of so-called 'desert cathedrals', unable to integrate into the local economy, and the dual economy, which exists in the economy and at the level of regions in technological and production cultures.

The growth paths of individual counties also outline the changes in the spatial structure during a given period. The dynamics of development at county level and the individual development paths can be described *by means of GDP per capita, gross monthly average wage, FDI per capita, the number of foreign enterprises and the rate of unemployment.* The change as compared to the base year (1994=100%) reveals the medium-term dynamics of the counties.

Each and every dimension analysed resulted in a different outcome, however, it is worth noting that certain counties moved in tandem. The results only cover the rate of growth or decline and do not indicate either past or present rankings.

Table 1 documents the medium-term changes and the development of the new spatial structure.

The growth of *per capita GDP* provides an undisputedly clear picture. Using a mainstream term of economics, in respect of GDP/capita growth dynamics, four counties – the capital and developed counties in Transdanubia – have proved to be

[20] Klekner (1987).

'competitive' over the last ten years. Of the counties displaying average growth, we have to highlight Heves and Szabolcs-Szatmár-Bereg counties.
Comparing data from 1994 with that from 2003, we see the different dynamics of regional development. The weighting of the capital increased from 183 percent in 1994 to 207 percent in 2003. By contrast, the 62 percent of Nógrád county dropped to 54 percent. These are the two extremes; however, with the exception of Budapest, GDP growth exceeded the national average only in Komárom-Esztergom, Pest and Győr-Moson-Sopron counties.

Table 1

Changes in county level indicators between 1994 and 2003, 1994=100

	Above average	*Average*	*Below average / falling*
GDP/capita	Budapest, Győr-Moson-Sopron, Komárom-Esztergom, Pest	Fejér, Heves, Szabolcs-Szatmár-Bereg, Vas, Veszprém, Zala	Bács-Kiskun, Baranya, Békés, Borsod-Abaúj-Zemplén, Csongrád, Hajdú-Bihar, Jász-Nagykun-Szolnok, Somogy, Tolna
Gross average wage	Budapest, Pest	Bács-Kiskun, Baranya, Borsod-Abaúj-Zemplén, Fejér, Győr-Moson-Sopron, Heves, Jász-Nagykun-Szolnok, Komárom-Esztergom, Nógrád, Somogy, Szabolcs-Szatmár-Bereg, Tolna, Vas	Békés, Csongrád, Hajdú-Bihar, Veszprém, Zala
FDI/capita	Borsod-Abaúj-Zemplén, Fejér, Győr-Moson-Sopron, Hajdú-Bihar, Jász-Nagykun-Szolnok, Komárom-Esztergom, Pest, Veszprém	Heves, Szabolcs-Szatmár-Bereg	Budapest, Bács-Kiskun, Baranya, Békés, Csongrád, Nógrád, Somogy, Tolna, Vas, Zala
Number of foreign enterprises	Budapest, Komárom-Esztergom, Pest, Szabolcs-Szatmár-Bereg, Vas	Heves	Bács-Kiskun, Baranya, Békés, Borsod-Abaúj-Zemplén, Csongrád, Fejér, Győr-Moson-Sopron, Hajdú-Bihar, Nógrád, Jász-Nagykun-Szolnok, Somogy, Tolna, Veszprém, Zala
Drop in the rate of unemployment	Budapest, Fejér, Győr-Moson-Sopron, Hajdú-Bihar, Jász-Nagykun-Szolnok, Komárom-Esztergom, Nógrád, Veszprém	Csongrád, Pest, Somogy, Zala	Bács-Kiskun, Baranya, Békés, Borsod-Abaúj-Zemplén, Heves, Szabolcs-Szatmár-Bereg, Tolna, Vas

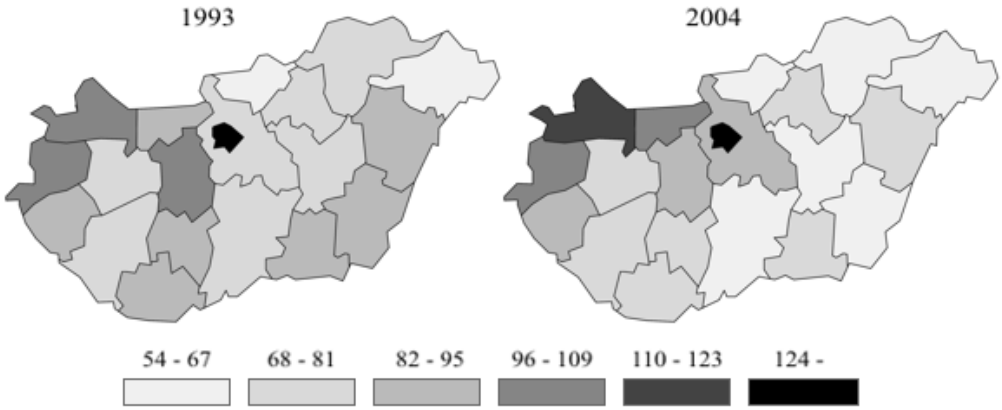
Source: Own calculations based on HCSO data

In 2003, the regional breakdown of GDP/capita resembled a mosaic (see map). Whereas in 1994, the counties at a similar level of development were found more or less in one region and there was no substantial difference between neighbouring counties, in 2003 the picture is rather varied. Regional units pursuing individual development paths produced a completely different rate of growth. At the same time, this mosaic distribution of county figures calculated as a percentage of the national rate does not run counter to the strengthening of regional disparities determined by neighbourhoods. Data in 2003 shows a sharp demarcation line in terms of development between Eastern Hungary[21] and the Central region[22], as well as Western Hungary. Former industrialised zones, scarcely populated areas,

[21] Eastern Hungary: Heves-, Nógrád-, Szabolcs-Szatmár-Bereg counties
[22] Central Hungary: Budapest and Pest county

rural regions less favourable for agricultural activities and counties with a uni-sectoral focus outline different levels of development both in Eastern and Western Hungary.

Figure 2
Regional differences of per capita GDP in 1994 and 2003 as % of country average (1995 prices)



In terms of *incomes* the dominance of the capital is the most spectacular. Budapest and Pest county have retained their dynamic growth whereas certain counties in the Southern Great Plain and Zala county displayed a below average wage increase. When analysing income statistics, we must not ignore the ratio of private and public sector workers. The table does not highlight the above-average wage increase recorded in Nógrád county for a long period of time. This county in the north of Hungary was at the bottom of the list for a long time, but this changed in 2003 when it moved up to 15th. This improvement is due to the already mentioned ratio of the public and private sector. In Nógrád county, the number of jobs is so low that the wage increase in the public sector induced a considerable improvement, which for a long time was over the national average.

According to the data of the mid-1990s, *FDI per capita* was outstanding only in two Transdanubian counties, Győr-Moson-Sopron and Vas, as well as in Békés county in addition to the capital. Data from 2003 already shows some counties closing the gap. Whereas the Transdanubian counties were joined by Komárom-Esztergom and Fejér county, the northern and eastern parts of the country also showed a considerable improvement. In spite of this, the difference between the county with the highest and lowest number of foreign investors rose from 22-fold in 1994 to 25-fold in 2003.

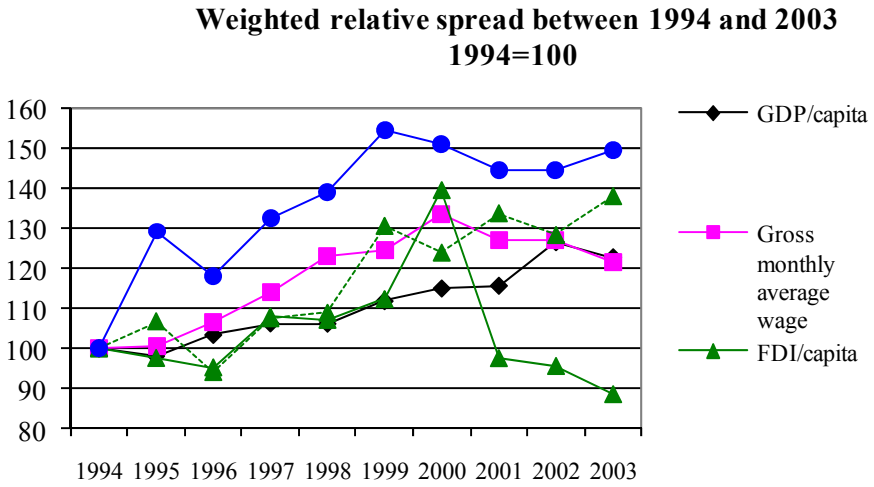
In terms of per-unit investment data, Győr-Moson-Sopron and the North-Transdanubian counties[23] were in the lead, surprisingly joined by Borsod, Hajdú-Bihar and Jász-Nagykun-Szolnok counties. Budapest and two West-

[23] North-Transdanubia: Fejér-, Komárom-Esztergom-, Veszprém counties

Transdanubian counties[24] Vas and Zala are in the group with below average per unit FDI investment figures.
Looking at the number of *foreign enterprises,* Budapest, Komárom-Esztergom, and Szabolcs-Szatmár-Bereg, Pest and Vas counties stood out from the rest. The extremely high figures in Szabolcs-Szatmár-Bereg county are related to the changes in the legal background pertaining to the establishment of economic partnerships, which resulted as of 2001 in a high number of Ukrainian natural persons registering their enterprises in the county, mostly in the area of 'multi-level marketing'.
In 1994, the national rate of *unemployment* stood at 10.7 percent. Two counties in Transdanubia – Komárom-Esztergom and Zala – registered similar data, the Central Hungarian region as well as Vas, Fejér, Csongrád and Békés counties were below the national average.
The ranking in terms of unemployment ends with Borsod, Nógrád, and Szabolcs-Szatmár-Bereg counties which are about 1.5-times the national average. On the basis of the 2003 unemployment data, a varied picture emerges. On the one hand, Nógrád, Hajdú-Bihar and Jász-Nagykun-Szolnok counties improved their rankings, but on the other hand, Borsod, Szabolcs, and Heves counties did not change positions significantly, they are still at the bottom of the list.
At the same time, however, we cannot ignore the impact of job creation because in Nógrád county, in spite of the unfavourable position of the county, the number of those out of work has been reduced considerably. In the northern county similarly to the developed Transdanubian counties and the capital, the rate of unemployment has rapidly decreased.
In 2003, in addition to the capital it was only Győr-Moson-Sopron where the rate of unemployment was below four percent, which essentially can be considered as the natural rate of unemployment. Therefore, these counties cannot produce such a considerable drop in the rate of unemployment as regions with high unemployment rates.

Figure 3

[24] West-Transdanubia: Győr-Moson-Sopron-, Vas-, Zala counties



Source: own Figure based on HCSO data

The regional distribution of *GDP/capita* was rather uneven between 1994 and 2003. In the case of GDP/capita, the weighted relative spread of 41 percent in 1994 increased by nearly ten percent to 50 percent by 2003. In the analysed period, this variable of all showed the most unambiguous trend of increased regional inequalities. The GDP/capita indicator, in spite of all the methodological problems and reservations concerning its use as the single indicator of development, has shown a widening gap during the analysed period at county-level and increasing inequalities throughout the country.

The regional distribution of the *gross monthly average wage* of wage earners had exhibited the dynamic growth of inequalities until 2000, from 15 percent to 20 percent. After the year 2000, the spread values dropped and/or stagnated, then after a further decline in the last year stabilised at 19 percent.

By contrast, the regional distribution of *FDI* per capita started to show convergence. This occurred during the last two years we have data from, between 2001 and 2003. Due to the shortness of the time series and in order to confirm the trend, we calculated the spread excluding data for Budapest. Even if the capital's share in incoming FDI dropped from 70 percent at the beginning of the decade to 50 percent by 2003, this share still has a significant impact on the distribution of regional data. Based on the resulting time series there is a slight but clear increase in the spread data, indicating that in addition to the overweighting of the capital, the uneven county distribution of FDI even in the short run will have a polarising effect on regional development, which is confirmed by the average spread of the GDP per capita data at county level.

During the 10-year time series regarding the regional distribution of the *unemployment rate* we identified five periods of growth. From the first year until 1995, when an increasing trend of inequality unfolded, the spread value peaked at 32 percent. This was followed by a slight adjustment, by 1996 the spread value had dropped to 30 percent. Between 1996 and 1999, the inequalities rose again to 38 percent, then a slight adjustment is followed by stagnation. From 2002 to 2003,

a period of growth was observed. Amongst the variables examined, FDI and the unemployment rate produced the most hectic changes. This results from the uncertainty factor that is linked to the labour market reacting the most sensitively to changing economic cycles.

Relations between the indicators

In the course of the regional analyses the question arises as to what extent individual indicators move in tandem, whether or not it is possible to establish some causal relationship between them. In our case, the key indicator is the regional distribution of FDI. The intensive role of FDI and foreign enterprises in the Hungarian economy is obvious.[25] We all know the influence FDI has on employment, the structure of exports,[26] the balance of payments, the budget and investments[27]. Even by means of simple statistical methods, correlations can be drawn between the intensity of investments and corporate performance, export capability, wage outflow, sharing taxes and the increase in added value, not only at the level of the national economy but also at the level of counties.[28] We quantified the impacts of FDI on the spatial structure by establishing the strength of the correlation between FDI and the other indicators.

However, when analysing *economic development* (GDP/capita) and FDI we came to surprising conclusions, which although do not run counter to the assumption that investments have a decisive role to play in the first stage of regional economic growth, it does call into question the long-term decisive effect of growing capital investments. This also provides a further field of research for the separation of capital investments according to the level of technology.

The relation between FDI and regional development was obvious and increasingly strong in the first period between 1994 and 1997. As of the end of the decade, however, the correlation between the two indicators clearly weakened, dropping from an extremely strong value to a strong value (r = below 0.9). The process confirms the regional inequality trends described in the introduction of this paper, according to which the regional restructuring as of the middle of the decade has been based on growth. In this case, it means that local growth is driven by mature productive investments.

The relation between the *monthly gross average wage* and FDI/capita is very similar to the trend between GDP/capita and FDI per capita. The correlation between the two indicators is between the two extremes, 0.82 and 0.93, then a steady decline sets in from 2000, which ends in 2003 at 0.85. When analysing the outcome though, we have to take into account the fact that in 2001 the process of wage correction started (minimum wage increase and wage increase in the public sector), and the convergence of wages, which can be traced through the declining spread values of the monthly gross average wages, significantly distorts real market processes. The regional distribution of wages reflects less and less the regional distribution of foreign enterprises.

[25] Hamar (2001).
[26] Éltető (1999).
[27] Molnár (1999).
[28] Hamar (1999): pp.16-17.

The relation between the *unemployment rate in the counties* and the county-level FDI/capita changed in 2000, when after the hectic changes in the negative correlation, the inverse relation increased from -0.36 to -0.65, which comes very close to a strong correlation. This highlights the job-creating role of investments, even if in this period these enterprises employed not more than 25 percent of all the labour force in the private sector (HCSO 2004).

The hectic changes of regional development all indicate differentiation. During the ten years covered by the analysis regional development gaps at county level widened.

The spread values calculated on the basis of counties together with Budapest show a levelling off in the regional distribution of FDI. However, if Budapest is excluded from calculations, the spread values indicate a sharp divergence, generating new inequality centres instead of evening out the regional distribution of variables. In a positive sense this might result in the emergence of counterweight(s) to Budapest, the three counties that could potentially assume this role are primarily Győr-Moson-Sopron, Komárom-Esztergom and Pest.

Partly due to the evening out of wages, the income level shows convergence. By contrast, the differences in the unemployment rate are growing owing to deteriorating macroeconomic data.

The interdependence of FDI and regional development first shows a rising then a falling trend, similarly to the gross monthly average wage and FDI/capita. Contrary to this, the rate of unemployment indicates a strong inverse relation in the last period of the analysis, derived from the high territorial concentration of investments.

Individual regional development paths determining the new spatial structure display a high degree of regional differentiation in terms of development indicators in individual regions. Growth and decline at macro level determined by economic cycles diverge regionally to a substantial degree, and in some cases these divergences are extreme. Certain regions react more promptly than others to circumstances changed by economic cycles. This is not just due to the different regional dynamics but also to the 'inherited' sectoral structure and the government's development policies. Based on experience in the 1970s and 1980s we come to the conclusion that the mono-cultural production structure shaped by a mono-sectoral development policy implies several risks at regional level, as does supporting investments taking no heed of the amounts or nature of the assistance.

The requirement to reduce regional, social and economic disparities has surfaced with renewed momentum after Hungary's accession to the EU. Several Hungarian and international analyses have been elaborated on the current situation and the possible solutions, however, in the light of the strategic documents published so far it seems that results of professional work do not always translate into practice.

References

Dusek, T. (2000): A regionális GDP számítás problémái (The problems of calculating regional GDP). *Kisalföldi Gazdaság* 2000., 24 March, Győr-Moson-Sopron Megyei Kereskedelmi és Iparkamara

Dusek, T. (2004): Területi jövedelmi folyamatok Magyarországon (Regional income processes in Hungary). in Magyar Földrajzi Konferencia, 2004, Szeged, CD ROM (www.geography.hu) p. 21.

Éltető, A. (1999): A külföldi működőtőke hatása a külkereskedelemre négy kis közép-európai országban. (The impact of FDI on foreign trade in four small Central and Eastern European countries). *Közgazdasági Szemle*, January 1999., pp. 66-80.
Hamar, J. (2001): A külföldi és a hazai tőkével működő vállalatok szerepe az iparban. (The role of companies operating with domestic and foreign capital in industry). *Külgazdaság,* April, pp. 4-34.
Hamar, J. (1999): A külföldi működőtőke beáramlásának területi és szektorális jellemzői Magyarországon. (The territorial and sectoral features of FDI influx in Hungary). Kopint-Datorg, Műhelytanulmányok, Vol. 31.
Hováth, Gy. (1992): A magyar regionális politika súlypontjai. (The focuses of Hungarian regional policy). *Tér és társadalom* 1-2, pp.1-15.
Illés, I. (1992): A területfejlesztés irányításának kérdései. (Questions related to the management of territorial development). *Tér és Társadalom* 1-2. pp.1-15., p. 59.
Klekner, P. (1987): Az ipar területi fejlődése (The territorial development of industry). in Bartke, István (1987), A területi fejlődés fontosabb változási tendenciái az elmúlt évtizedben (Major tendencies of changes in territorial development in the last decade) (1971-1985). pp. 14-32., *Tervgazdasági közlemények*, Országos Tervhivatal Tervgazdasági Intézet, Budapest
Kornai, J. (1993): A szocialista rendszer. (The socialist system). Heti Világgazdaság Kiadói Rt. Budapest
The Statistical Yearbooks of the Hungarian Central Statistical Office
Magyar Nemzeti Bank, Fizetésimérleg módszertan, módszertani megjegyzések (National Bank of Hungary, Current account methodology, notes on methodology)
Major, K. – Nemes Nagy, J. (1999): Területi jövedelemegyenlőtlenségek a kilencvenes években. (Territorial income inequalities in the 1990s). *Statisztikai Szemle* 77/6. June, pp.397-421.
Sándor, I. (1996): A konjunktúra-jelzőszámok regionális különbségei 1995-ben. (Regional differences between indicators of economic cycles). *Statisztikai szemle* Vol. 74. Issue 12. December 1996., pp. 981-990.
Molnár, B. (2001): A külföldi működőtőke-befektetés hatásai a magyar gazdaságban. (The impacts of FDI on the Hungarian economy). *Gazdaság és statisztika* 2001/1. pp.10-18.
Nemes Nagy, J. (1987): Meghatározó tendenciák a területi fejlődésben (Decisive tendencies in territorial development). in Bartke, István (1987), A területi fejlődés fontosabb változási tendenciái az elmúlt évtizedben (Major tendencies of changes in territorial development in the last decade) (1971-1985). pp. 134-137., Tervgazdasági közlemények Országos Tervhivatal Tervgazdasági Intézet Budapest
Nemes Nagy, J. (1995): A GDP regionális számbavétele (The regional accounting of GDP) in Probáld F.(ed.) Pro Geographia Humana, ELTE Eötvös Kiadó, Bp., pp.99-118.
Nemes Nagy, J. (2001): Az ezredvég regionális folyamatai Magyarországon: átfogó átalakulás – egyedi fejlődési pályák (Regional processes at the end of the millennium in Hungary: comprehensive transformation – individual development paths.). in ELTE Regionális Tudományi Tanulmányok, 5. Budapest, ELTE Regionális Földrajzi Tanszék, pp. 23-33.

Икономически изследвания
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Nikola Vulchev[1]

QUALITATIVE EVALUATION OF THE AGRICUTURAL ENTERPRISES' MANAGERS IN BULGARIA

The paper discusses the state of the development of the labor resources in the agriculture of Bulgaria. Main tendencies are drawn for it, outlining that the changes after 1989 provoke substantial changes in their quantitative and qualitative dimensions. The focus is on the qualitative characteristics of the agricultural enterprises' managers – of private and corporate type. On one hand, the sustainable decrease of the absolute number of the employed in the branch, the worse age reproduction structure of the agricultural population, the unfavorable educational structure and the unfavorable business environment for development of the agricultural activity influence adversely. On the other hand, the registered positive results in the economies with size over 100 decares used agricultural land give reason to draw the optimal conclusion that the large enterprises, producing for the market, possessing agricultural equipments and employed agricultural workers, are managed by considerably young managers with suitable agricultural education.
JEL: Q13

The state of the labor resources in the agriculture in Bulgaria is determined by their quantitative and qualitative parameters and it changes under the influence of two groups of factors – internal and external. The first group is the internal factors, which are the character of the agricultural production and the motives for labor put in. The second group includes the external factors, connected with processes and phenomena running outside the agricultural enterprise (employment in branches and activities different from the agriculture; labor conditions; public value of the agricultural labor; prestige and awarding of the agricultural labor).

The changes in Bulgaria after 1989 influenced the state of the labor resources in this so significant for the national economy branch and led to changes in their quantitative and qualitative parameters.

The main thing concerning the qualitative changes of the labor resources in the agriculture is the sustainable decrease of the absolute number of the employed in the branch. Only for the period 2000-2003 they are reduced from 781 thousand to 758 thousand employed. This is a natural process, running under the influence of the mechanization and industrialization of the agricultural labor.[2] But on the other hand, also known are the consequences from the shortage of labor force in the branch – worse quality of execution of the agricultural works, delaying the term of

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[2] Vulchev, N, P. Angelova. Agrarian Economy. Gorex Press, Sofia, 2005, pp. 92-93.

their execution, decreasing the average productions of agricultural cultures and the productivity of the agricultural animals, amortization of a significant part of the production and raising the prices of the remained part of it.

The share of the employed in the agrarian sector in all employed in the national economy in 2003 is 25.4% and in 2004 – 24.9% - much higher than in the EU countries.[3] Such high share of the employed with low share of GVA of the agrarian sector in the GVA of the national economy determines low labor productivity in it. In 2003 it reaches only 2616 USD GVA per employed and in 2004 – 2825.[4] But if we take into consideration data from labor force observations carried out by NSI, the picture can be different. By the used methodology for observation of the households an employed only in agriculture is considered a person who works in enterprises with mostly commodity character. Then in 2001 the employed people are 235 thousand, in 2003 – 264.5 thousand and in 2004 – 256.6 thousand. Their share in the total employed in the national economy is respectively 7.9, 8.3 and 7.9%. These are values close or equal to those of some of the smaller EU countries, which have the similar agriculture to the Bulgarian one.

Alarming is the fact that for example in 2003 95.5% of the labor people in the branch are from enterprises of physical entities, not registered by any law and only 4.5% are from enterprises of juridical entities (sole proprietor, trade companies – agrofirms, cooperations, etc.). Even more alarming is the fact that 71.7% of the labor people in 2003 are from enterprises with size under 10 decares, i.e. in court non-commodity enterprises.[5] Almost half of the labor people (47%) have used 1 to 50% of the work time, equalized to full annual employment.[6] These facts give answer to the question what is one of the main reasons for the low labor productivity.

The rates of decrease of the labor force employment in the agriculture depend mostly on the following factors:

- degree of replacement of the labor force in the branch by the introduced achievements of the science and technology progress;
- influence of the season character of the production and labor, which leads to lower annual employment and lower annual payment;
- more favorable labor, production and social and public conditions, which the branches and activities outside the agriculture offer.[7]

The qualitative characteristics of the labor resources in the Bulgarian agriculture is determined by the structure by age, gender and education.

The age structure is a significant indicator, since it characterizes the quality of the labor force in the branch and the reproduction abilities of the agricultural population. The age of the employed determines the efficiency, physical skills and their mental abilities.

For the period 1997-2004 the following changes occur in the age structure of the employed in the Bulgarian agriculture:

[3] Data from Statistical Reference Book. NSI, Sofia, 2005, p. 54.
[4] Ibid, pp. 54, 202.
[5] According to data from Census of the agricultural enterprises in Bulgaria in 2003, Agrostatistics, Ministry of Agriculture and Forests.
[6] Ibid.
[7] Vulchev, N. P. Angelova. Agrarian Economy. Gorex Press, Sofia, 2005, p. 93.

- the share of the employed aged between 15 and 34 decreases (with 11.2 points);
- the share of the employed aged over 55 increases (with 17.5 points);
- the group of employed aged between 35 and 54 maintains highest share, with certain decrease (with 3.5 points).

The main reasons for this state are a few. First, a demographic one. It is the worsened reproduction of the population, which forms the labor potential and labor force, including for the agriculture. Second, it is the unfavorable structural, economic, social and political environment for entrepreneurship in the agricultural production, because of which there are no stimuli for establishing and exploitation commodity agricultural enterprises, or if there are – they are extremely weak.

The tendency of aging of the employed in the agriculture leads to unfavorable consequences. On one hand, the reduction of the group of aged up to 34 today will influence the reproduction of the population in the future and will decrease the inflow of people who produce agricultural production. From the point of view of insuring the population with the necessary food products, the ratio between those who produce and those who consume them will be changed in favor of the latter. This is a fact with unforeseeable consequences for the national food insurance. On the other hand, the opportunities of the aging labor force to participate in the establishment of competitive agricultural enterprises are strongly limited.

The gender structure of the employed in the Bulgarian agriculture differs with sustainable tendency of decrease of the share of the women. This tendency is considered a positive phenomenon. The forecasts for the technics and modern technologies entering the Bulgarian agriculture show that this tendency will remain and even accelerate. There is worsening of the age structure of the women employed in agriculture. In 2000/2001 up to 34 are only 10.7% of the women employed in the branch, and over 55 – 53.1%.

The structure of the employed in the agriculture by education adds to their qualitative characteristics. In 2004 the distribution of the employed by their education is as follows: with higher education – 4.8%, with high education – 36.4% and with secondary or lower – 58.8%.[8] The reasons for the state of the educational level of the employed in the agriculture with developed in this direction educational system are mainly three. First, the high share of the old people in the structure of the employed, who are generally with lower education. Second, the unfavorable environment for establishment and exploitation of agricultural enterprises, which contradicts with the interests of the young generation. Third, the broken family tradition and the died out economic need of inheriting and continuing the agricultural activity in the villages due to the collectivization of the production and the urbanization of life.

In order for Bulgaria to have enough labor resources for development of the agriculture in perspective the attention should be directed towards changes in the life environment in the villages and village regions and changes in the environment for agrarian entrepreneurship, which will lead to positive change in the intentions for orientation of the young people towards investment and labor in the agrobusiness.

[8] According to data from Main results from the observation of the labor force – NSI.

The worsened age and reproduction structure of the agricultural population, the unfavorable educational structure and the unfavorable business environment for development of the agricultural activity influence also the qualitative characteristics of the managers of the agricultural enterprises – of private and corporate type. The data of the agrostatistics show that to the beginning of 2001 only 12% of the managers of the enterprises of physical entities and only 9% of the managers of the agricultural cooperations have been under 40 years old. For the enterprises of juridical entities (enterprises of sole proprietors, limited liabilities, shareholding companies, etc.) this share is higher – 16%. The same is the situation in the next age group – from 40 to 60 years old. In the enterprises of juridical entities 63% of the managers fall into this age group, while in the enterprises of physical entities they are 41%, in the cooperations they are 62%. The total picture shows that the dominating part of the managers of the agricultural enterprises of corporative type – respectively 63 and 62% fall into this age group. The old managers – over 60 years old – are typical for the enterprises of physical entities – 47% and for the enterprises of cooperations – 29%.

The education and professional qualification of the managers of the agricultural enterprises is not enough high. The data of the agrostatistics show that only 12% of the managers of the enterprises of physical entities have agricultural education. Again this share in the economies of corporative type is higher – in the enterprises of agricultural cooperations – 71% and in all other juridical entities – 65%. There are no substantial differences in the share of the managers with agricultural education by type of enterprises, with one exception – in the enterprises of physical entities the managers of the enterprises with plant-growing specialization this share is a little higher than average for these enterprises and reaches 22%.

The data from the carried out census of the agricultural enterprises in 2003 again confirm this state – almost 67% of the managers of the agricultural enterprises are of over 55 years of age, and the women managers are 18%. More significant is the share of the women managers in the age group of up to 25 and over 55 – about 25%.

The average age of the managers of the agricultural enterprises by the size of the used agricultural land shows that in the enterprises of physical entities, who cultivate average 14 decares, 16% of the managers are of age over 55 years. Far better is the picture in the enterprises with size over 100 decares of used agricultural land. There 62% of the managers are under 55 years old. These enterprises are only 1% of the total number of the enterprises, which participated in the census in 2003, but they cultivate 83% of the used agricultural land. This circumstance allows to draw the optimal conclusion that the large enterprises, producing for the market and possessing agricultural technics and employed agricultural workers, are managed by relatively young managers with suitable agricultural education.

Икономически изследвания
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Tamás Novák[1]

DEVELOPMENT OF SMALL AND MEDIUM-SIZED ENTERPRISES IN HUNGARY

This paper aims at giving a snapshot on the major trends of SME development in Hungary. After a brief historical background, the focus is put on the current changes taking place in the Hungarian enterprise policy. A major transformation is underway in the SME financing as a result of the substantially increasing EU funds available for enterprise development. This process is also supported by the favourable competition policy rules applicable for the SME sector in the EU. These changes are also supported by the increasing competition between commercial banks for financing possibilities, the target group of which policy is the SME sector. Besides, the concentration of the SME support system with the aim of increasing effectiveness of state subsidy for SME sector is also carried out.
JEL: F15, L21, L25

Following the change of the economic and political regime and as a result of the transformation that took place from the early nineties on, the number of market actors multiplied and private property became predominant in Hungary. The size structure of enterprises underwent radical changes. Small and medium-sized enterprises (SMEs) became the most numerous category and took over the bulk of activities that used to be performed by large enterprises earlier. To date, small and medium-sized enterprises play a significant role in economic and social life. 99.9% of all enterprises are SMEs, employing more than two-thirds of the employed and responsible for the production of almost half of gross added value.

EU policy towards SMEs

In the process of European integration it was in the 1980s that the role, situation and strengthening of SMEs at the level of the Community became an important task. This was the raison d'étre of the First Multi-Annual SME Programme. In June 2000, the European Charter for Small Enterprises was elaborated; in April 2002 all candidate countries joined to this Charter. The programmes are implemented under the auspices of the DG Enterprise and Industry of the Commission, but also integrated SME programmes are formulated on the related tasks (R&D, innovation, education-training, job creation, etc.) of the other DGs. As competition and innovation have moved more and more into the foreground, one of the focal points

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of the SME policy became the strengthening of entrepreneurial mindset and behaviour. In 2003 the Green Book on 'Entrepreneurship in Europe', in 2004 the 'Entrepreneurial Action Plan' were published. The revision of the Lisbon Strategy strengthens these programmes and integrates the tasks stronger than before to enhance competitiveness and innovation.

The European Union wishes to promote the start up of SMEs and their development, the strengthening of an entrepreneurial mindset and behaviour in two equally important ways: on the one hand, by providing a favourable business environment, by improving the framework conditions; on the other hand, by programmes backed with funding. These supporting measures are applied in the individual Member States through national programmes, realizing and complementing the EU policies. The national programmes in Hungary have so far concentrated too much on individual financial aid and preferential treatment.

The European Charter for Small Enterprises has identified ten major areas for strengthening small enterprises. Governments are called upon to report annually on progress made and conferences regularly discuss the national experiences. These are now going to be linked to controlling the implementation of the Lisbon action plans. Recently published EU resolutions frequently repeat the underlying idea of the Charter, i.e. 'Small enterprises are the backbone of the European economy' and the 'Think small first' slogan. The Community Strategic Guidelines to Cohesion Policy 2007-2013 formulates SME-related targets in conformity with the Charter, but in a broader context with regional emphasis. In November 2005, the SME strategy of the EU was revisited. The new document 'The Implementation of the Community Lisbon Programme. Modern SME policy for employment and growth' should give new impetus to the Union's SME policy. The five priority areas of the measures are as follows:

1. Promoting entrepreneurship and skills.
2. Improving SMEs' access to markets.
3. Cutting red tape.
4. Improving SMEs' growth potential.
5. Strengthening the dialogue and consultation with SMEs stakeholders.

The European Council on 23-24 March 2006 in its Presidency Conclusions (Points 26-31) confirmed these objectives and so did the Presidency Conclusions (Point 20) of the European Council held on 15-16 June 2006. The quoted titles of the five chapters in the new strategy indicate the focal points. The question arises: Are these objectives and tasks represented with adequate weight in the Hungarian SME strategy and programmes as well? Or does the different situation of the Hungarian SMEs justify other priorities? Before answering these questions, I need to reflect to the misleading translation of the first priority area 'Promoting enterprises and entrepreneurial skills'.

In the international and EU terminology, a definite distinction is made between enterprise and entrepreneurship. Enterprise is a form of organisation, whereas entrepreneurship is a kind of mindset and activity. The current Hungarian official language, however, does not make the same clear distinction – and the official translation of EU documents also follows this bad practice. For example, the first task set by the European Charter for Small Enterprises is 'Education and training for entrepreneurship', which has been translated into Hungarian as follows: 'The education and training of enterprises'. This mixed Hungarian terminology deprives

the EU priority of its essence; it does not reflect the strong emphasis contained in EU documents.
Nowadays, the EU and the OECD talk about SME and enterpeneurship policy instead of SME policy only. Far greater emphasis than before is accorded to strengthening entrepreneurial thinking and risk-taking attitude, for two reasons. On the one hand, more start-ups, new enterprises are expected, which sharpen competition and press market players to improve their performances. On the other hand, also recent surveys confirmed that the larger proportion of the self-employed, the owner/managers of micro- and small enterprises (and many medium-sized enterprises) do not aim to grow. Entrepreneurship for them is preferred as independent life-style. The OECD study prepared for the Ministerial Conference in Istanbul assumes that three-quarters of small enterprise owners are 'life-style entrepreneurs'; only one-quarter endeavour to achieve growth and only one-fifth of them (i.e. 5%) actually achieve real, significant growth. Therefore, strengthening entrepreneurial thinking among SMEs is considered to be very important, needless to generate more jobs and higher growth rates.

SMEs in Hungary

During the nineties, the structure of Hungarian enterprise sector changed dramatically. Regarding their number, SME-s became absolutely predominant. Entreprenurial activity measured by the number of SMEs in Hungary compared to the EU Member States is second after Ireland. The structure of the SME sector became similar to the least developed countries of the EU (Portugal, Greece) by the turn of the century. The relative number of enterprises and their size are almost the same, and their income generating capacity is also increasing.
The overwhelming majority of operating enterprises (96-97%) is a micro-enterprise employing less then 10 persons. Their share in EU comparison is high, however the average size of enterprises is among the lowest in the EU. An average enterprise employs 6 persons in the EU and only 4 in Hungary. As the sectoral structure of the enterprises is concerned, most of them are operating in the services and trade sectors, while the manufacturing, construction and the productive sector in general is low.
During the past few years a number of processes took place that substantially modified the characteristics of the sector. Their situation is basically different from the situation of the nineties. As a result, the system and objectives of SME development have to be adjusted to the new situation. In order to catch up to EU-level and increase the competitiveness of the SME sector, the strengthening of the operating SMEs and improving their performance is a precondition. The role of SME in employment is increasing and this should be a most important task regarding SME development policy.
The regional distribution of SMEs in Hungary shows significant imbalances in favour of the capital and the developed regions. The aim of the economic policy is also to decrease regional differences and thus eliminating the duality currently present in the country through the enterprise support and the employment policy.
The situation of SMEs is Hungary is basically determined by a contradiction. On the one hand, they have a significant and increasing role in GDP production and employment. On the other hand, due to several factors, their technology level is low that makes very difficult for them the competition with larger firms. The same

goes for their productivity and adjustment capacity. The lack of sufficient own resources makes their competitive position even more difficult.
The group of SMEs is very heterogeneous: according to the EU definition it covers three groups of enterprises of very different characteristics: micro-enterprises (0-9 employees); small enterprise (10-49 employees; medium enterprises (50-249 employees). These groups have very different characteristics, so it is not justified to speak about the SME sector without clear distinction between its subgroups.
In Hungary SMEs have increasing importance. The share of SMEs in total revenues of enterprises is 59%, in export amounts to 35.6%, they account for 48% of total own capital of the enterprise sector and produce around 51% of GDP, while 74,2% of the employed work in SMEs. Investments of SMEs showed great volatility between 2001-2004. Investments performed by the total enterprise sector increased by only 1% in real terms during this four year period, but SMEs were much more active. In 2004-2005 SMEs have increased their credit stock significantly indicating strong investment activity.

Table 1

Investments of SMEs

Size	Share of different group of SMEs in investments (%)	Investment dynamics in 2004 (2001=100)
0-1 employees	14	137
2-9 employees	14	102
10-49 employees	20	155
50-249 employees	13	91
SMEs total	61	119
Over 250 employees	39	82
Total	100	101

Source: Hungarian Central Statistical Office

The Hungarian SME sector shows several differences comparing to the EU average. The most significant differences compared to the EU average are the following:

- In Hungary 61 SMEs exist per 1000 inhabitants while in the EU25 only 49.
- The productivity of SMEs in Hungary is lagging behind large enterprises more than in EU25. Its reason is partly the inadequate capitalization (25% of SMEs have less than 1800 euro as own capital)
- The productivity and competitiveness of Hungarian SMEs is also far from the majority of SMEs in the EU.
- The technology level is low (R+D expenses in Hungary is under 1% while in EU 25 is around 2%)

Table 2

Contribution of SMEs to Economic Performance in Hungary and in the EU

	Micro-enterprises	Other small enterprises	Medium enterprises
Contribution to employment (%)			
Hungary	37.8	17.7	15.9
EU	39.6	17.4	13.0
Contribution to GDP (%)			
Hungary	18.3	16.0	18.3
EU	21.2	14.1	15.7
Share of export in revenues (%)			
Hungary	1	8	16
EU	9	13	17
Relative level of labour productivity (average=100)			
Hungary	49	97	115
EU	53	80	121

Source: Román

The Hungarian business environment has been deteriorated in recent years due to unfavourable changes in the macro- and microeconomic environment even comparing to the Visegrad Countries.

- According to the World Bank certain items of the entrepreneurial environment are very different in Hungary compared to the Visegrad countries. Market environment generally is favourable, however the institutional and regulatory conditions are unfavourable.
- The best performing area is credit availability, the worst are those of administrative character (e. g. management of permits).

Table 3

Ranking of entrepreneurial environment according to the World Bank

	HU	CZ	PL	SL
Establishing an enterprise	72.	77.	92.	48.
Management of permits	119.	87.	120.	40.
Employment and dismissal	85.	60.	64.	74.
Ownership registration	96.	55.	75.	6.
Credit availability	24.	21.	86.	28.
Investors protection	34.	68.	22.	118.
Taxation	98.	70.	106.	69.
External trade	38.	24.	34.	60.
Enforcement of contracts	31.	21.	104.	81.
Terminating an enterprise	50.	101.	23.	44.
Average of rankings	52.	41.	54.	37.

Source: Doing business 2005

New Directions in the Hungarian Enterprise Development

As a result of the EU membership and in order to help SMEs to improve their competitiveness in the new economic environment, in 2005, the Hungarian government started to elaborate a new SME development strategy for 2007–2013. Interventions identified under the new strategy aim at remedying market failures and will be limited in time. The main goal will be to deliver the development services to a much higher number of enterprises than before. The new strategy plans to reduce administration cost of the utilisation of development resources.
In this period resources will be channelled to the enterprises essentially by a market-conform financial intermediation system. The participants of this system are expected to become, within a few years' time, fully integrated sub-systems of the money market, capable of autonomous operation, without further donor financing. In the period of 2007–2013, the European Commission intends to allocate part of the Structural Funds to financial programmes, through a mechanism called JEREMIE. It would be useful to adjust the national financial programmes for SME development to this mechanism, as that would facilitate the drawing of the resources concerned on the one hand and help ensure efficient programme implementation on the other.
Typically, the following enterprises would be financed through financial intermediaries:

- Enterprises not financed by the commercial banks cost-effectively of scale reasons, with a good potential for growth, requiring a small initial credit amount (micro-crediting).
- The potential target companies of capital investment that would not be financed by the traditional capital market actors due to their very small size.
- Enterprises active in areas characterised by high regional risks, but showing a good potential for growth.

The main principles of the new enterprise development programmes are as follows:

Functional Approach

Policy development should start out from functions instead of organisations. This will open up much wider perspectives for potential measures. Implementation should be assigned to those organisations that will serve this aim best.

Sustainability

The current, almost 100%, donor-dependence of the programmes must be reduced. The main reason for that is not the need to save budget resources, but the recognition that self-sufficiency is the most effective primary incentive for and also the best measure of client-centred, useful services. In the absence of that, the intermediary organisation's most important client will remain the donor, instead of enterprises.

Institutional Development, Capacity Building

Instead of financing operation, the policy objective should be to develop structures capable of self-sufficient operation. It needs to establish the legal and regulatory

environment for capacity-building and operating new type of instruments (e.g. organisations capable of efficient micro-crediting).

Co-ordination Based on Market Mechanisms

The current mechanisms of implementation monitoring and control are essentially administrative in nature. The outcome of the reform would be a system governed by market co-ordination through competition, the success indicator being the increase in the generation of value added.

SME-financing in Hungary

A crucial area as regards SME development in Hungary is the availability of financing. There is a clear tendency that SMEs are not very much relying on bank credits in Hungary, 80% of enterprises operate without credits. This ratio in more developed countries is 15–20%. At the same time however there is an increasing importance of SMEs for commercial banks, due to certain factors. On the one hand, in our days there is a huge liquidity in international money markets indicating an increasing importance of acquiring new clients and investment possibilities for banks. On the other hand, the need for new investment opportunities is also strengthened by the dynamically increasing credit activity of and competition among commercial banks. However, in spite of these favourable changes for SME, start up enterprises with low capitalisation still hardly can obtain the necessary volume of credits. This continues to be an important market niche.

Table 4

Share in the total enterprise credit
(December of the given year) %

	2001	2005
Micro-enterprises	12.9	17.1
Small enterprises	9.3	17.7
Medium enterprises	17.4	18.5
SMEs total	39.6	53.3

Source: Hungarian Central Statistical Office

The other very important channel of finances for SME-financing is the System of State Aid for the sector. Important actors of state aid and financing of SMEs are development institutions. As regards the enterprise development system, in Hungary significant changes took place in recent years. In order to improve credit availability for the Hungarian SMEs, the concentration of enterprise development system is going on. At the end a one-stop shop institution is to set up (‘Bank of Enterpreneurs’) handling all instruments available for enterprise development. This kind of concentration has several advantages.

- Resource concentration: Connecting EU sources, domestic state support and market sources)
- Increasing competitiveness: Savings in state budget
- Concentration of functions: Increasing transparency
- Concentration of competencies: Cutting overlaps

The SME financing from state resources is made easier by the EU-regulation too. In spite of the strict regulation of competition, the conditions of state aid to SMEs are less rigorous than to big enterprises. The reasons of this special care are manifold: the important role of SMEs in employment; SMEs are generally not disturbing trade between Member States; the development policy of Member States concentrate on SMEs.

A third channel of SME-financing theoretically could be Venture Capital Investments. However, in Hungary enterprises mainly finance their activities with credits rather than corporate bonds. Issuing bonds is limited to few, basically foreign-owned enterprises. Especially start-up business face difficulties in obtaining financing. Suprisingly however, in the case of development capital, there is no lag behind the EU. According to data from 2004, such investments amounted to 0.119% of GDP in Hungary compared to 0.085% in EU15. All in all, this channel for SME financing is still not very important.

Between 2007-2013 financing prospects of SMEs may improve substantially as Hungary is expected to receive huge amount of support within the framework of the EU structural policy. The National Development Bank connects development priorities of enterprises and the EU resources. The availability of market based financial resources also improves significantly: the concentration of the state development system may play an important role in it. Certain changes in the competition policy accepted by the EU (e. g. regulation on de minimis aid) may increase the volume of state supported credits as well.

Table 5

Development resources between 2007 and 2013 (EUR billion)

EU support	22.6
Domestic financing	7.5
Other domestic resources	26.4
Total	56.6

Source: National Development agency (Hungary)

Regional imbalances in SME development

Since the 1970s, changes have taken place all over the world in the area of competitiveness conditions. The increasing importance of flexibility (the ability to adapt rapidly) and human relations took precedence over economies of scale, assembly lines and traditional comparative advantages. Therefore, the chances of small companies involved in the manufacturing of marketed commodities have improved, while the role of corporate groups (value chains) and regional relations – clusters (networks) – has grown. The spatial structure of the economy has also been modified, centres providing a wide range of services and peripheries making use of these services have been established. This is why the best-known innovation centres of our times are regions.

In the light of the above the European Union has taken wide-ranging and diverse measures to accelerate the development of networks, to decentralise innovation and technology policy, to transform universities into enterprising institutions and to establish a network of industrial parks. Since 1994 about one hundred European

regions have made attempts to implement the Regional Innovation Strategy recommended by the EU.

A fundamental problem of regional development in Hungary is that the regions do not (yet) have centres except for the capital. The regional institutional system is still weak, in spite of all the recent development efforts. Regions do not have any institutional system or financing resources, etc., suitable for promoting (local) development. In Hungary these assets are primarily owned by companies, municipalities and counties (if at all).

In the rapid development of centres further difficulties are posed by the small size of Hungary's regions and their centres by international comparison and the low level of transport infrastructure development between the centres and between the centres and their peripheries. An additional problem is the lack of regional specialisation, which is indispensable in the context of successful competition, and the fact that national development concepts do not treat specialisation as a priority. Therefore, when implementing development decisions we frequently encounter the lack of skilled labour and the lack of vocational qualifications among the increasing number of those unemployed. In potential regional centres the structure of research, consultancy and education should be aligned with the knowledge demands of productive sectors. But the establishment of centres is made difficult by the fact that they only have occasional relations with businesses, although it has to be noted that internationally competitive universities and research institutes, which accumulate innovative knowledge, are not only to be found in the capital cities but also in several other provincial cities, both in Central Europe and in Hungary. No networks of knowledge users have been established around universities, while regional development concepts do not contain any tasks that could co-ordinate or harmonise available 'knowledge' and practical demands.

The weakness of incubators for start-up enterprises also frequently prevents micro- and small-sized enterprises from fully utilising regional development opportunities.

According to the GEM report, Hungarian companies are generally dissatisfied with services meant to promote their activities, which inevitably are local. Though they acknowledge that a significant improvement has taken place in the areas of banking, accountancy and legal services, further development is necessary in terms of their quality, price and availability. The poor information-communication infrastructure is also a major obstacle to the development of networks.

Table 6

GDP per capita in the regions of the EU (at 2002 PPP, EU25= 100)

Rank	Region	GDP/capita	Rank	Region	GDP/capita
1	Inner London (UK)	315	246	Vychodne Slovensko (SK)	39
2	Brussels (BE)	234	247	Northern Great Plain (HU)	38
3	Luxembourg	213	248	Opolskie (PL)	37
4	Hamburg (DE)	188	249	Northern Hungary (HU)	37
5	Ile de France	176	250	Swietokrzyskie (PL)	36
6	Vienna	174	2251	Podlaskie (PL)	35
7	Berkshire et al. (UK)	162	252	Warminsko-Mazurskie	34
8	Provincia Bolzano (IT)	160	253	Podkarpackie (PL)	33
9	Stockholm	158	254	Lubelskie (PL)	32

Source: Eurostat

Due to the listed factors, it is not at all surprising that the performance of the majority of Hungarian regions is rather low. In the 254 NUTS 2 (Nomenclature of Territorial Units for Statistics) EU regions there are two Hungarian regions among the ten lowest performers on the eastern border of the EU.
The outlined difficulties are further aggravated by the fact that the Hungarian documents on regional development barely reflect or contribute to the implementation of local development ideas and efforts due to the weak interest representation capacity of regional institutions, and definitely far less than is common in international practice. In spite of the EU methodological guidelines emphasising the 'bottom-up' approach (subsidiarity), neither regional development concepts nor the National Development Plan take important opportunities for local businesses into account, including small- and medium-sized enterprises. They do not identify in concrete terms the most promising, competitive or potentially competitive sectors, companies, products and production cross sections in the concerned regions. They do not tackle the profiles which still exist but need to be eliminated. They do not contain precise recommendations on priorities (the users of potential development aid from the government, EU, etc.). Consequently, local organisations and small- and medium-sized enterprises who never play insignificant roles as regards implementation are not interested in achieving the set objectives and the financial resources available for the developments become fragmented during use. Accordingly regional strategies must be revised and the priorities contained therein be specified.

Conclusion

Two-thirds of the active labour force work at SMEs and they create fifty percent of the GDP in the EU and in Hungary alike. However, the other half of the GDP and the majority of exports are produced by large companies, which in Hungary are mostly multinationals. The chances of the SME sector in the next year will improve, in spite of the temporarily unfavourable macroeconomic conditions that result in worsening business climate. The competition between banks for new clients, the drastically increasing EU funds for enterprise development and the transformation of the Hungarian SME development institutional system together can effectively contribute to evolve a much stronger and competitive SME sector.

References

Action Plan: The European Agenda for Entrepreneurship. EC, Brussels, 2004.
A kis- és középvállalkozások helyzete 2003-2004-2005. Éves jelentés. Gazdasági és Közlekedési Minisztérium, (The situation of SMEs 2003-2004-2005. Annual Report. Ministry of Economy and Transport.) 2005.
A Lisszaboni folyamat és Magyarország. (The Lisbon Process and Hungary.) Társadalom és Gazdaság. 27/1-2., 2005.
Cohesion Policy in Support of Growth and Jobs: Community Strategic Guidelines, 2007-2013. EC. Brussels, 2005.
Community actions for Growth and Employment: The Community Lisbon Programme. COM(2005) 330 final.
Doing Business in 2006: Creating Jobs. World Bank, 2005.
European Innovation Scoreboard 2005. EC, Brussels, 2005.
Flash Eurobarometer 160 Entrepreneurship 2004. EC, Brussels, 2005.

Fostering Entrepreneurship and Firm Creation as a Driver of Growth in a Global Economy. OECD, Paris, 2004.
Global Entrepreneurship Monitor. Executive Summary 2005.
Green Paper Entrepreneurship in Europe. EC, Brussels, 2003.
Presidency Conclusions – 23/24 March 2006. EC, Brussels, 2006.
Presidency Conclusions – 15/16 June 2006. EC, Brussels, 2006.
Román, Zoltán (2006): The Small and Medium-sized Enterprises and the Lisbon Objectives in Hungary, Development and Finance 2006/3, Budapest
The Istanbul Ministerial Declaration on Fostering the Growth of Innovative and Internationally Competitive SMEs. OECD, 2004.
Time to move up a gear. Annex to the Communication from the Commission to the Spring European Council. EC, Brussels, 2006.
Vállalkozások demográfiája, 1999-2003. (Demography of Enterprises.) Central Statistical Office, 2006.

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MOULDING CORPORATE BOARDS: A KEY CHALLENGE OF BULGARIAN CORPORATE GOVERNANCE?

The modern corporate governance structure in any country includes as its key factor the structure and functionality of the corporate boards. Currently, the boards experience a more or less radical change of their traditional activities and structure, acquiring new features and diversifying the old ones in order to answer of the raised demand before them by the business and social communities. The paper is revealing the status of the problem in Bulgarian companies within the immediate pre-accession period; it is based on a companies' survey selected from the main economic sectors. And, the main findings show an inclination of the current boards toward more traditional functionality and conservative structuring, i.e. the boards concentrate more in terms of time and quality to the traditional functions as overall governance and/or operational management and adopt appropriate structures. This also means that the surveyed boards are more reluctant of dealing with the functions like resolving of conflicts of interests and more flexible structuring as creating specialized committees, especially when things come to the nomination and compensation of the board members. Hopefully, the recent amendments of the legal framework in the field will provoke a restructuring and diversification of board functionality toward the highest present-day standards.
JEL: G32, G34, G38, K22

Introduction

The analysis of the modern corporate governance structure applied to one or another country includes the analysis of the structure and functionality of the corporate boards as a key factor for it. The boards experience a more or less radical change of their traditional activities and structure, acquiring new features and diversifying the old ones in order to answer of the raised demand before them by the business and social communities. That demand is constantly increasing, especially in the light of the current evidence of business and managerial malpractice, abuse of the accounting and financial standards. For the countries of the South Eastern Europe, the importance of the issue for better corporate board practice is even higher because of the still large spread practices of violated minority shareholders rights, weak stock markets etc.

The current survey is targeted on revealing the status of the problem in Bulgarian companies within the immediate pre-accession period; data is from 2002. It is based on the survey for 81 companies selected from the main economic sectors[2].

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In most synthesized appearance, the main findings show an inclination of the current boards toward more traditional functionality and conservative structuring, i.e. the boards concentrate more in terms of time and quality to the traditional functions as overall governance and/or operational management and adopt appropriate structures. This also means that the surveyed boards are more reluctant of dealing with more recently assigned to them functions as resolving of conflict of interests and more flexible structuring as creating specialized committees, especially when things come to the nomination and compensation of the board members. However, the recent amendments of the legal framework in the field initiated a rather deep restructuring and diversification of board functionality toward the highest present-day standards.
The paper consists of nine sections, devoted on data of the survey and on the important aspects of the corporate boards role as their structure, presence of independent members in them, evaluation and compensation of their members, their committees and their functions.

1. Legal framework

The Bulgarian legislation regulating the activity of the companies goes under a deep reconstruction in the last 12 years, which changes radically a large number of laws. Unfortunately, for most of the time of this renovation, the very idea for the corporate governance was not recognized as a separate problem, thus contributing much to dispersion of the relevant legal matter among number of laws. Nevertheless, it is still possible to study the regulation of corporate boards as an integrated problem spread into several different layers. First, there is a general regulation applied to all the joint-stock companies.
Then, the issue could be tracked down through various laws, treating businesses from more specific branches, such as banks, investment companies, insurance and pension assurance companies. These provisions vary throughout the acts, but it is still possible to cast those institutions in a more general group of financial sector.
The third major (and different) regulation is provided by the Law on the public offering of securities (LPOS). It covers only public companies, which for Bulgaria does mean the exclusion of a very large part of the banking system; in fact just two average-size banks are public companies.

General Case

The Bulgarian Commercial Code provides just very basic regulation of the **duties and powers** of the corporate boards. Perhaps, the most important piece concerns the structure of the governance bodies; Bulgarian law allows existence of both single-tier and two-tier structures. Thus, there are companies with just a board of directors (BD) or with supervisory board (SB) and management board (MB). Boards of directors and supervisory boards are selected by the General Shareholders Meeting (GSM) and management boards – by the SB.
As to the **composition of the boards**, the legal framework determines the maximum length of one mandate of any of the boards at five years, unless it is shorten by the company's statutes, but there are no limits on the number of mandates a person could serve. There is no required qualifications for the board's members except of that to be legally capable to act. While, the Code leaves space

for the companies' by-laws to impose further requirements for their board members, the only restriction imposed by itself prevents from membership persons who served on a corporate board of a failed company which unsatisfied creditors for the two years preceding the failure.
At that level of aggregation, Bulgarian law does not recognize the intracompany's allocation of functions among the board members and assigns equal rights and responsibilities to them even in terms of representative and managing powers. This resembles the Anglo-Saxon tradition, but it is not the case. That rule is targeted only on ensuring equally **loyal** behavior among all the board members. That is explicitly stipulated by bounding their service to the interests of the company. The crucial and perhaps, the controversial point here seems to be that, what is ensured are the interests of the company and not of its shareholders. That seems a minor difference, but it is very substantial if one consider that company's interests are always realized through its managers.
There are no provisions for the due diligence in the Commercial Code and the **conflict of interests** is barely marked. It is regarded just at GSM level, banning the votes of those shareholders, who have plaints or actions brought against. While, the law requires a minimum amount of money to be provided by the boards' members as a guarantee for their service, again, there is neither criteria for this service nor rules, how should that guarantee be used.
As a general tendency, Bulgarian law follows the German tradition as to the governance structure. It clearly divides the board members into executive and non-executive, prohibiting the members of the supervisory board to be members of the management board and vice versa. Moreover, functions of the supervisory board are confined to electing and overseeing performance of the executive managers. The same differentiation is applicable for the members of the Board of Directors requiring that the executive members should be less than the others. True, this differentiation covers just the functions performed, but does not encompass their actual status in the company's business, e.g. the size of their holdings, established business relations etc. Thus, the separation line does not cross through the insiders and outsiders; moreover, even the definition of the independent directors is not introduced at this level of aggregation.

Financial Sector Regulation

Not surprisingly given the scarce general regulation, the business units from the financial sector have to comply with more rules for their corporate boards. First of all, the members of managing boards/boards of directors of all types of the companies – banks, insurance and pension assurance companies and investment intermediaries, need to posses professional qualification and skills in the relevant field. Most strict are those requirements for the insurance companies and for the banks. Both call for university degree in economics or law (mathematics for the actuers) plus certificate from the Central Bank for banks and, alternatively, long experience (more than 5 years) in the field for the insurers. Pension companies could be managed with any university degree, and that is not specified for the investment intermediaries suggesting that qualification of their managers could be obtained by shorter training programs or even just by practice.
Further, more restrictions are added on participation in the BD and MB of the close relatives - spouses, brothers etc., more stringent are the restrictions on

membership in boards of failed companies – for the banks the monitored period is prolonged to 5 years before the bankrupt and for other institutions it is not specified at all including this way under observance, all the time of service of a particular board member. The relatively lax restriction for banks could be understand, if one recall the not so distant in time wave of bank failures, which left very few bank managers not affected one or another way.
Also, more restrictions are added before the person wishing to get a position on corporate board: the sentence for general criminal offences, the ban on taking financially accountable position and some more specific, as any involvement in security business, especially introduced for the insurance companies. To understand last idiosyncrasy one should know, that for a period of time, part of the criminal groups in the so called "security" business became fully legal "insurers", which undermined stability of the sector.
The requirements for the members of supervisory boards are similar, but they do not have to posses specific background and professional experience.
What concerns, the loyal conduct of the business there are many rules covering the relations between the financial institutions and their clients, bounding the action of the former to the interests of the latter, but again there are no specific regulation on the relation between the major and minor shareholders, no explicit differentiation between the interests of the company and its shareholders, no mention to the obligation of the board members to act as prudent agents of their principals. Accordingly, there is no definition of the standards for diligence and loyalty. Similarly, there is no explicit regulation of the possible conflict of interests. Except for the banks.
The Law on banks clearly and specifically defines the cases of business interests which possibly may involve an administrator in a conflict of interest with his position in the bank. It is interesting that the law spans the regulation not just to the board members, but also to any administrator, which is a good point if one consider that the chief accountants are often not members of the governing boards.
The definition includes the interests not only of the members and their companies, but also of their families, of businesses related to them and also the companies they participate in with as small share as 10 percent. There is a procedure for notification and resolving of these conflicts, which brings that regulation to the highest standards. Moreover, the law on banking subordinates the interests of the board members to the interests of the bank and, most interesting point, stipulates that any deal made in violation of those rules are not legitimate and the latter might be proclaimed by courts. And the cases could be set up by, among the others, "a third interested party", which plainly includes minor shareholders and stakeholders as well.
This sophisticated banking regulation is not surprising and largely justified. As mentioned earlier, Bulgarian banks are almost entirely out of the public companies list, and there are not many signs that they will be included there in near future. And that makes understandable why their corporate governance regulation is more detailed and precise than the one provided by the Commercial code.

Public Companies

This is the group, which has the most detailed corporate governance regulation. True, most of the provisions, which are discussed below have been adopted few

months ago and practically all of the rules, which need to be approved by the GSMs are not in action since the Law on Public Offering of Securities (LPOS) provides time for adoption to the next General meeting. Nevertheless, most of the changes are profound and will change the corporate environment radically in this country.

First of all, there have been adopted a number of rules for composition of the corporate boards. A definition for the independent board members was introduced. It is relatively strict and excludes:

1. all the company's officers;
2. shareholders with 25+ percents of the votes in the GSM possessed directly or via related persons;
3. persons with longstanding commercial relations to the company;
4. all board members plus procurators and/or officers of the companies from p.2 and p.3;
5. persons related to another board member.

Moreover, for the first time in Bulgarian commercial practice, it is established a quota for representation of the independent members in the BD or SB and it is, at least, one third of them. The quota is dynamic and requires information on any status change and provides for suspension of the duties and remuneration of those members who lost their independent status. True, the legislation still has not come to the perception for the length of the membership as a factor limiting the independence of the members, but it is a large step in the right direction.

Second, the last changes in LPOS establish the most open and clear statement of the duties of the board members. They should run the business with the due diligence of the prudent owner in the interests of all the shareholders and using only the information taken faithfully as reliable and complete. Further, the board members due loyalty to the company and that means "preferring company's before one's own interest" avoiding conflict of interests and not disclosing insider information, even after being released from the board.

The board members plus the procurators are obliged to answer honestly, comprehensively and accurately to the questions of all the shareholders, no matter are they on the agenda or not, except for the insider information.

Third, the provisions for the conflict of interest are not just proclaimed, but well secured. There are a number of norms requiring disclosure of the possible conflicts to the relevant board and abstention from discussions and decisions upon that issue. Apart of that, there are restrictions for a set of deals which may involve the so called "interested parties"; these are namely the insiders, when they are party of a deal with the company or are related persons to such a party. Those deals should be reported by managing body to the GSM and it decides on them, with qualified majority of ¾ in some cases. The law goes even further, stating that many deals involving "interested parties" should be concluded only under the regime of a joint-venture contracts, requiring approval from the two companies and with additional regulation.

That complicated procedure is not surprising having in mind the already 12 years history of so called "company's tapping" when parties related to the management stick to its entrance and exit with "transfer price" contracts. After the privatization, this practice, once developed for the state-owned enterprises, was successfully applied to the public companies inflicting huge loses on minority and individual

shareholders. Hopefully, those new regulations will help to quit with certain abusive practices.
Forth, the recent amendments in the law enlarged regulation of the procedure for determination and conditions for receiving of the board members remuneration. The level and the terms of it are explicitly assigned to the GSM, which is not new. Maybe it is important to underline that in Bulgaria the compensation of all the boards, including the managing board and/or those of the executive directors of the MB are within the competence of the GSM, and as such are accountable. Even in the case of procurators, an executive position which received immense spread last years, as a good tool to avoid some regulations applied to the boards, the law holds SB/BD accountable before the GSM. They have to explain what salaries have been paid to the procurators and what was the performance of the latter. Further, the above mentioned collateral due by the board members as guarantee for their governance and management is now precisely outlined; who has to deposit it, where and how, how it might be released and under which conditions it will be withheld; all those questions are clearly answered.
A more thorough revision of the legal framework may find some regulatory blocks still missing, e.g. the existence and the role of board committees are not even mention nowhere, but the recent amendments introduced in it seem to be an excellent basis for a serious improvement of the corporate governance of Bulgarian companies.

2. The survey – sample and method

Any regulation has always two sides – legislation and enforcement, and unfortunately, at least for the transitional countries, the second one is always more controversial. Thus, if one needs to know a bit more for the structure and functions of the corporate boards, he/she needs to observe them in practice. The sources of information for current Bulgarian corporate boards are limited. The Commercial registers provide general biographical data; more information is maintained in the Securities Commission registers, especially for the ownership structure.
However, the information for the existing practice, e.g. for resolving conflicts of interests could only be found in the minutes of the board meetings or directly from the board members. Thus, the methodological choice went on surveying opinions and information from highly positioned officials in hundred joint-stock companies on the composition and practice of the corporate boards in Bulgaria. It is important to say, that this survey is a pilot one, to the best of my knowledge for Bulgaria and, accordingly, it bears all of the omissions and faults of such a pioneer effort.
The survey (data is from 2002) does not cover the formal standards for a representative sociological survey because of many reasons, but perhaps, the most important is its limited budget. Although, any effort was made by the survey agency and the research team to gather an active and diversified sample of joint-stock companies. The general method was a standardized interview, though in some cases the responses were acquired impersonally.
Eventually, 83 valid cases were gathered; the companies are grouped into three aggregated branches – industry, building, tourism - 54.22%, financial, banking, insurance, assurance, investment intermediation - 24.10% and trade, services (non-financial) - 16.87%. 4.82% of the companies determined themselves as others.

More than half (54.22%) of the companies are with less than 100 employees, 21.69% are between 101 and 250, 10.84% - between 251 and 500, another 8.43% are between 501 and 1000 and just 3 cases are with more than 1000 employed persons; one answer is missing.
Bulgarian corporate ownership is highly concentrated (see Tchipev, 2001) and the actual results for that index were not surprising: 61.45% of the companies are majority controlled, 42.17% - with Bulgarian and 19.28% - with a foreign dominant shareholder. Another 6.02% of the sample companies have a leading shareholder controlling between 33 and 50% of the stock and again the dominant shareholder's control in them is almost unlimited. Just 14.46% are with smaller leading blocks and they might be expected to be at least a bit more demanding in terms of better corporate governance model, though even their shareholding packages are far bigger than what is considered a dispersed ownership by the international standards. To that group might be added, with less certainty, those 17% of companies which have two and more leading blocks of 33-50% size, but that heavily depends on the extent the biggest and the second large shareholders collude among themselves; an issue practically impossible for independent verification.
About one quarter of the companies indicate in their ownership structure a presence of former privatization funds as portfolio investors, which are considered to be potentially active in the corporate governance.
More than 80% of the companies from the sample have single board governance structure; they are distributed as follows - 51% in the industrial sector; 23% in the financial business and 20% are providing non-financial services. Fifteen companies (18% from the total sample) are with 2-tier governance structure (supervisory and managing boards); they are split between the industrial and financial sectors in proportion two to one.
No specific distribution of the governance structures could be detected by size.

3. Structure of corporate boards

The majority of the BDs - 54.10%, consist of 3 members and another 33% of them have 5 members. If one recall that the minimum legal number is 3, an average of 3.97 members per board of directors seems number-wise. The figure for the supervisory boards is similar; the average board has 3.4 persons and over 70% of them are constructed of three persons (3 to 7 allowed by law). Managing boards in the survey are bigger - the average of them has 4.4 members and an equal distribution of three- and five-member boards (up to 9 allowed by the law).
The survey has not identified in the corporate statutes setup of other or stronger qualifications for taking a position on the board than those required by law. True, some of the companies in our example pointed out such qualifications as educational or professional skills as needed, but all of those cases belong to the financial sector and hence, those requirements are also established by law. The actual educational and professional structure of the members in the observed boards is represented in the following table.

Table 1

	Educational level			Professional qualification				
BD	High school	BSc.	MSc., MA, PhD	Law	Economics	Finance*	Civil engineer	Other
242 cases	0.00%	15.29%	77.69%	10.74%	42.15%	10.74%	29.75%	8.68%
SB								
51 cases	0.00%	5.88%	88.24%	18%	37.25%	17.65%	19.61%	1.96%
MB								
66 cases	0.00%	6.06%	81.82%	6.06%	28.79%	16.67%	30.30%	10.61%

Note: In few cases the same members are shown as both economists and financiers.

The rather high educational level has at least two explanations; first, the standard university program until recently was targeted at magisterial level as a basic one and so people who graduated 5-7 years ago and earlier obtained normally that level. Second, perhaps the more important, university education is still easy accessible at relatively low cost, which makes it a must, though it also devaluates it.

More unusual seems the high share of civil engineers in the managing boards and the boards of directors. That may signal a more technical attitude in the roles performed by the boards, than usually expected, but this fact certainly should not be exaggerated at this level of the analysis. On the whole, the size and the qualification structure of the observed corporate boards do not represent anything specific; maybe they are rather smaller, which definitely speak about more plain functionality and certainly is not a very strong prerequisite for a diversified subsystem of committees.

Much more interesting is the board structure in terms of "additional" relations of the members with the company itself or its business. **Table 2** shows the distribution of board members along three such important relations. Some points need a comment here:

First, not all of the boards report members with "additional" company relations. The actual number vary between 30 and 50 percent of all cases for the different relations.

Table 2

	BD		**SB**		**MB**	
Board members who are:	Share from all members	Average number*	Share from all members	Average number*	Share from all members	Average number*
employed as managers or else in their companies	47.11%	2.15	9.80%**	2.50	56.06%**	3.08
(or represent) share-holders with 25% or more votes in GA	35.54%	1.79	11.76%	0.75	1.52%	1.00
in governing bodies of other companies	34.71%	2.55	23.53%	1.71	25.76%	2.43
in governing bodies of affiliated company	30.99%	2.59	27.45%	2.33	22.73%	2.50

* cast just out of the non-zero cases; they vary along the features

** a possible misunderstanding, the law prohibits SB members to participate in the operational management; from the other hand, all of the MB members are supposed to be involved in it.

Second, in those boards which reported, have quite large number of members have such complex relations. Almost half of the members of the BDs in our example receive another remuneration from the company; that is more than half on an average board.
Third, a considerable share of the board members, especially on the boards of directors are themselves, or represent large shareholders. The relevant figures for the companies with two-tier governance structure are much lower. That, especially for the structure of SBs, corresponds with the lower share of majority controlled firms among them and with the higher share of the foreign leading shareholders. The lower figure for the managing boards seems due to the predominant practice to appoint professionals for the operational management.
Sitting on another board is a good instrument for securing preferential contacts with a controlled or else related company; that explains the high figure for the BD/SB. The explanation for the MB is more uncertain; it seems that this has something to do with the also high share of managers sitting on the boards of affiliated companies.
Forth, the number of the BD members who possess more than one of those feature is large, the total share is 148.3% and the excess over 100 percents suggests that many members have more than one such a relation, i.e. large shareholders are often also managers in their or related companies. apparently, this is a serious prerequisite for entering in conflicts of interests especially if the alternative number of the independent directors is low.

4. Independent Members

Fortunately, it is not that low; according to the survey, almost 34% of all members of the boards of directors are independent, a fair enough figure. That is 1.33 independent persons on average board of directors. Here, the averages are calculated from all of the cases, which provided data for their boards, i.e. contrary to the above cases we include here also the zero-independent cases too. True, a 47% of the BD do not indicate independent members, but that does not necessarily mean that they had not them at all; the qualifications for independence are rather strict and quite new, hence one may expect that some of the interviewed officials simply do not know all the board positions taken by their colleagues.
Supervisory boards show surprisingly close figures - 35.29% of all reported cases and 1.2 persons on average board. Finally, 29.41% members of the managing boards are shown as independent, which makes just one persons per board, although they have an overall bigger size. The data still reveals the situation before implementation of the obligatory quota for the independent members of BDs and MBs and one may expect that number to rise soon.
That hope seems justified to some extend from the answers concerning the *issue of adopting provisions in the companies' by-laws guaranteeing the opportunities of the independent directors to stand their opinion.* True, just less than 4% of the valid cases (57 for this particular question) answer positively, that they have already adopted such provisions; it is also true that another 40% provide the firm answer - *no, this question is not on the agenda*, but there is also almost 20% of respondents, who admitted that the issue is discussed, though still not accepted, and another 20%, who discarded the issue, because the number and the influence of the independent directors in their company are negligible. Since, they will face it

pretty soon, at the next GSM, one may expect that more companies will understand that it is important not only to have the independent directors in the board, but also to allow them to stand up that position.
An interesting information to that picture is that in 70% of the cases the chairman of the BD/MB and the CEO are not the same persons. This is a good evidence that in the case of two-tier governance structure the executive (managing) functions are quite well separated from the functions with more governing character. What concerns the figure for the managing boards, which is even higher than that for the BD (75 against 68%) it is little puzzling. True, the management boards are bigger as whole, which give them a chance for some diversification of the functions, but at the same time this is a clear indication that not all of the managing boards are completely involved in the direct management. Regardless, how it will be interpreted as abstaining of that involvement or the opposite as interference of the related persons (given the large number of large owners in the boards for example) in it, the eventual outcome is that managing boards in Bulgaria are resembling the BD in some extent.
To round up, Bulgarian corporate boards are not very big in size, with a relatively high qualified members, most of whom are connected to the company or its business by one or more "stronger" relations, though a substantial part of them are independent, especially what concerns to the single-tier governance boards.

5. Evaluation and compensation

The overwhelming majority of the companies (75.9%) respond that they do evaluate performance of their boards as a whole in a purposely section at the annual General Shareholders' Assemblies; in few cases - less than 3%, the boards are evaluated at the end of their mandate and 21.7% of the cases do not have any special practice of evaluation stating that the best evaluation for the boards is the overall performance of the company.
Almost the same are the figures concerning the evaluating of just the executives - 70% of the companies report that their CEO are accountable periodically before the BD/SB; in another 5% of the cases controlling board oversees several indices of firm's performance (e.g. the sales) and evaluates the activity of the CEOs on that base and 21.7% say that they do not have practice an explicit evaluation. Hence, the controlling board decides about the CEO's activities on the base of its overall perception.
Just less than 40% of the companies prove that there is a connection between company's performance and both the basic remuneration and the bonuses awarded to their board members; 28.92% report a partial connection including, i.e. the basic remuneration is definite and the bonuses are flexible, dependent on the performance. And, unfortunately, the share of the companies, which believe in policy of compensation disconnected from the performance of the CEOs is rather high - 27.71%.
The forms for the bonuses over the basic salary are also notable - 48.19% of the board members receive pecuniary bonuses, 25.30% receive various non-pecuniary benefits as covered housing or training expenditures etc. Corporate stock is really unpopular as a compensation bonus (0%!), but this seems a justified outcome from the illiquid and underdeveloped stock market in the country. Another 2.41% use a mix of bonuses, which differ from case to case and 7.23% believe that

they do not need to pay bonuses if the basic remuneration is high enough; 17% have not responded to that question.

Table 3 presents the performance indices used as benchmarks for determining the variable part of the board members compensations. Three points deserve more attention here.

The total does not exceed much the 100%, pointing that not many companies use more complex system for measuring the boards' performance. The third place is occupied by others, but unfortunately most of the respondents did not specified what do they mean; among the provided answers are: the level of attained investments, the level of company debt, the level of average wage. And of course, the last place of the care for the returns per share! Again, we encounter the low level of care for the plain investors.

Here it comes one of the most challenging questions in the survey - *How the average remuneration of the CEOs relates to the average remuneration of the non-executives?* A huge share of companies' policies (47.83%) do not differentiate the remuneration of the CEOs and non-executive board members. For another 27.54% - executives' compensation does not exceed with more than 30% the average remuneration of the non-executives and just in ¼ of the cases, the remuneration of executives is higher. Of course, one may interpret the data in a way that the non-executive receive a really high compensation, but my feeling is that the alternative explanation fits the case better – the compensation of the executives does not reflect to a sufficient degree their efforts to run the company.

Table 3

net profit	55.22%
sales volume	43.28%
other (please specify)	16.42%
market expansion	7.46%
maximizing the returns (capital gains and dividend) on a share	7.46%
Total	129.85%

Note: the total exceeds 100% because some of the interviewed persons pointed more than one index, the overall valid cases are 67; 16 companies have not responded to the question

The attempt to investigate the absolute levels of board members' compensation failed almost completely. We got about 60% of declined answers plus another 3.6% not answered at all, though according to the legal regulation, the remunerations of the board members are determined and announced at the GSMs, i.e. they are public by their nature. But, it seems, that the issue is still very sensitive for the top officials and most of them consider it too personal. Among those which provided positive answers, 60% indicated remunerations up to three average company salaries and just 13% reported levels above 5 times the average company's salary. This speaks for a rather moderate absolute remunerations, which coincides by the way with the information coming from the tax service, but as I said our data is not enough large to judge decisively on it.

The survey included also a question about regularity of board seminars to discuss important corporate issues, which is not exactly a matter of board valuation, but it definitely may help the self-valuation process. Almost 75% of our respondents report some kind of such discussions, but only 31.33% have them regularly and

formal; others meet informally or as an exception. And 24% find themselves too busy to bother with such events.
Finally, we asked the boards also for a direct self-evaluation and of course, more cases were in the upper part of the 1 to 5 scale – 85% indicate 3 and higher, but in fact the valuation is rather objective – 57% stick to the average.
Rounding up this section it has to be said, that in more cases functioning of Bulgarian boards is monitored, though this monitoring is rather formal – as more or less standard annual reports prepared supposedly, by the boards themselves. Monitoring of just the executives seems to be more intensive, though its organization and frequency do not seem to be radically different. Even the self-valuating meetings are not regular. As a general practice executives and non-executives are treated equally, which seems to me being on the account of the executives. Naturally, compensation seems to depend somehow on the performance of the company, though this is again very general, sticking to indicators, which benefit the company (and the managers) themselves than the shareholders particularly.
Thus the overall impression is, that the nomination and remuneration of the board members is more or less a self-understanding, (and not very public) issue and there are not many attempts to use it as a powerful instrument, which is consistent with the results received on another question – out of all 83 investigated companies just 2 (2.41%) reported that they have committees on managerial compensation and none on nomination and selection.

6. Board committees practice

Apparently, it is not just the above two board committees, which are unpopular among the Bulgarian corporate boards. Unfortunately, all of kinds of them share similar fate; we found almost 75% of all cases without committees - the only 21 positive answers offered a total of 28 committees. The excess over 100% indicates the presence of few cases with more than one committee – 2 cases with three and 3 - with two committees. The “others” cases include two committees - on investments and on damages, whatever the latter may mean.
Table 5 summarizes the main findings about the existence and the size of the specialized committees created to the corporate boards. The relatively high number of auditing committees is a result of the increasing significance of this process for disclosure of information and for independent monitoring of the corporate performance. At the background of the overall short-termed business horizons in Bulgaria, perhaps it is slightly surprising, the share of the strategic planning committees, but the financial stability in last years, encourages the companies to look farther.
The average size of those committees varies among the different types and it is rather large – between 3-4 members, i.e. it is even larger than the average board. That is, of course, due to the much smaller pool of the valid cases here, which contains apparently companies with bigger boards. This is an interesting proof that the average size of the Bulgarian boards in general, is not large enough to match the higher standards raised before the contemporary corporate boards.

Table 5

Committees	Number	Share of all cases	Share of positive cases	Average number of members	Efficiency valued on 1 to 5 scale
For strategic planning	11	13.25%	52.38%	4.56	3.80
Auditing	13	15.66%	61.90%	3.33	4.18
On compensation	2	2.41%	9.52%	3.00	4.00
On selection & nomination	0	0	0	0	0
Others	2	2.41%	9.52%	n.a.	3.50
Sum	28	33.73%	133.33%		
No official committees	62	74.70%			
Total	83	108.43%			
Just positive cases	21	25.30%			

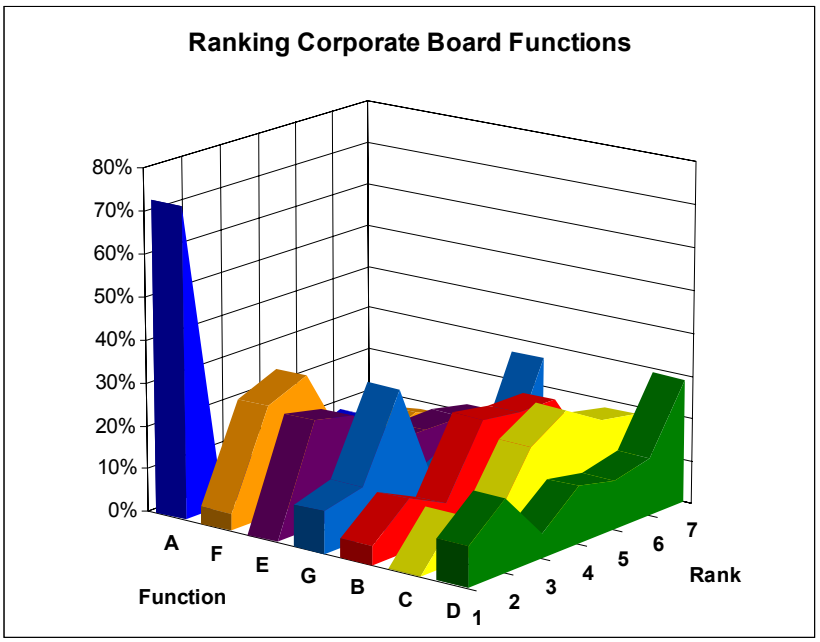
The investigation of the independent members in those committees show averages of one person for the planning and auditing committees and zero for the others, but the positive cases are few and the criteria for independence, as mentioned earlier, are introduced just recently, hence those answers do not seem enough revealing.
Similarly to the overall evaluation of the boards provided in the previous section, here also the higher marks prevail, though the element of self-evaluation is supposedly weaker – the probability that the respondent is him/herself member of such a committee is lower.
One of most helpful questions for understanding the real role and significance of Bulgarian corporate boards' committees is that on the regulation of their creation. There is just one statement that the committees are regulated under a Code of Best (governance) Practice, adopted voluntarily as an instrument for improving of company's governance; the other positive answers divided equally (47.06% each) between "committees are set and guided under the company by-law" and "we create just ad hoc committees when needed"; about 20% of those who reported their committees have not provided information on their regulation.
This might well help summing up that section. Bulgarian practice still does not include very often creation of the board committees – they are often created on case by case basis and used in connection with the most usual functions and mainly for auditing purposes. Particularly limited is the use of those institutions in the most sensitive areas of selecting, valuating and compensating the board members themselves.

7. Board functions

Special attention in the survey has been devoted to the functions performed by the corporate boards. There were investigated the scope of performed functions; the time, which the boards spend on each of them; how efficiently they are performed and eventually what is the status of their regulation. As a basis to step on, the functions defined in Section V of the OECD Principles on Corporate Governance are chosen. Those seven functions are recommended, not required and cover a large scope of important activities more or less inherent to the corporate boards. Their character is rather fundamental and it does not seem a problem for an average company to adhere to them.

The functions are ranked by importance according to the preferences of survey respondents. The distribution of their preferences shaped four quite distinctive groups. Two of them are represented by functions **A** and **D**, which occupy quite definitely the first and the last places respectively. The functions **F** and **E.** exposing also close distributions, form the third group and share the second and third position in respondents' preferences. The same applies to the functions **B** and **C,** the fourth group, which may fit equally well positions four, five or six. The most intriguing is the distribution of the function **G**, which has two picks and may fit all positions after number 3; considering its overall distribution, as presented at the **Chart 1**, I placed it at the fourth place.

Chart 1



A Reviewing and guiding corporate strategy, major plans of action, risk policy, annual budgets and business plans; setting performance objectives; monitoring implementation and corporate performance; and overseeing major capital expenditures, acquisitions and divestitures.
B Selecting, compensating, monitoring and, when necessary, replacing key executives and overseeing succession planning.
C Reviewing key executive and board remuneration, and ensuring a formal and transparent board nomination process.
D Monitoring and managing potential conflicts of interest of management, board members and shareholders, including misuse of corporate assets and abuse in related party transactions.
E Ensuring the integrity of the corporation's accounting and financial reporting systems, including the independent audit, and that appropriate systems of control are in place, in particular, systems for monitoring risk, financial control, and compliance with the law.
F Monitoring the effectiveness of the governance practices under which it operates and making changes as needed.
G Overseeing the process of disclosure and communications

Table 6 presents the main findings about the board functions ordered according their rank **(column 1)**. The second column shows what share of time is spent by the boards on each of those functions if time spent on all of them is considered 100

percents. The third column shows the values, which the respondents give to the performance of each of those functions and the last one shows which functions have an explicit reflection in the corporate by-law.

Table 6

	Rank	Time spent*	Values	Explicit regulation**
A) Reviewing and guiding corporate strategy, major plans of action, risk policy, annual budgets and business plans; setting performance objectives; monitoring implementation and corporate performance; and overseeing major capital expenditures, acquisitions and divestitures.	1	42.38	4.06	91.67%
F) Monitoring the effectiveness of the governance practices under which it operates and making changes as needed.	2	16.36	3.88	70.83%
E) Ensuring the integrity of the corporation's accounting and financial reporting systems, including the independent audit, and that appropriate systems of control are in place, in particular, systems for monitoring risk, financial control, and compliance with the law.	3	17.04	4.27	62.50%
G) Overseeing the process of disclosure and communications.	4	9.76	3.85	62.50%
B) Selecting, compensating, monitoring and, when necessary, replacing key executives and overseeing succession planning.	5	8.46	3.54	66.67%
C) Reviewing key executive and board remuneration, and ensuring a formal and transparent board nomination process.	6	7.21	3.51	66.67%
D) Monitoring and managing potential conflicts of interest of management, board members and shareholders, including misuse of corporate assets and abuse in related party transactions.	7	8.20	3.63	41.67%

* few respondents have not divided the time precisely
** percent just of the valid cases

The largest share of the board time is spent on performance of function **A** encompassing quite comprehensively the activities, which are usually assigned to the operational management and which is equally innate for the boards of directors and managing boards. The time spent takes almost halve of all time of the relevant board and corresponds with the highest ranking of that function. The **A** function is regarded also as second best in terms of quality of its performance.

The two functions of the second ranked group - monitoring of the governance process itself **(F)** and monitoring of the financial reporting and auditing **(E)** - represent the other basic activity of the boards of directors and supervisory boards, namely, overseeing the management. The times spent on them are similar and are second largest in boards' agenda, though they are more than 2 times shorter than the time spent on the first function. In spite of the difference in the valuation of the two functions, their performance is valued relatively high, which corresponds with the importance and time they are given.

The time spent on the other four functions is close each to other, but much shorter; more than five times less compared to the operational management and more than two times – than the time for supervision. This puts them together more or less,

though they are very different in nature. The function with a bit longer performance time (**G),** and also with little higher performance value, represent an issue of currently fast growing concern - monitoring of the disclosure process and communications with the shareholders and the general public. As mentioned, it has also the most idiosyncratic preference distribution, which speaks out that this function is now developing, changing its place and importance in the priorities of the current Bulgarian corporate boards.

While the last place of the function called to ensure avoiding or resolving the conflict of interest is not unexpected under the current situation of Bulgarian corporations, with concentrated property, with recently introduced and not yet finished distinction between independent and not-independent board members etc., the relatively backward places of the two functions dealing with the selection and compensation of the board members seem rather strange.

In fact it fits well the low results on same issue received within the analysis of the board committees. The answer, at least partially, might be found in the Bulgarian Commercial Code; it assigns to the General Assembly not only the selection, but also the compensation of the BD and SB members. This certainly reduces the interest to those functions, given the predominance of the companies with single-tier governance structures, but selection of the executives is *par excellance* up to the boards themselves. Thus, the other part of the explanation seems to be the already uncovered reluctance of the boards to regulate those functions explicitly and therefore more open for public discussion.

The evidence on how the functions are regulated confirm that conclusion in most general way. The highly ranked functions and that means the very basic and unquestioned ones, receive not just more time, but they are also better performed and more frequently recorded explicitly in the companies' by-laws. And the low-ranked functions, more recent and/or more reluctantly open for public attention, like avoidance of the conflicts, are less often explicitly regulated – in our case more than twice than the functions and less well (or not at al) performed, though the differences in valuation are rather small as a whole.

8. Conflict of interests

As mentioned the legal matter concerning the conflict of interests has very short history in Bulgarian corporate governance practice. That imposes certain specifics of the investigated issue. In fact, on the question *Do you have in your company a procedure for dealing with such conflicts,* more than 50% answered *no, that issue is not in the agenda* and one need to add also another 19.28%, which simply declined the issue. Thus, at first glance, the issue might be interpreted negatively dubbing Bulgarian corporate boards like having low level of regulation and protection of the company's business from the conflicts of interests. But I believe, that one may see the issue in dynamics adding to those 7.46%, which already have a written procedure how to deal with the conflicts, that cases which insists that even without written procedure they have extended practice in the field and also those influenced by the recent law, who are currently discussing setting up of such procedure. Thus, the cumulative share of those cases reaches 28.93% out of all cases or 35.82% out of the valid ones; it still not that high, but seems promising in perspective.

The issue is not just important, but also controversial and the different representatives of the governing bodies meet it with different attitudes depending on the ownership structure in the company, on their own position of related or not person etc. That is the reason which stimulated us to seek opinion of our respondents on the actual (or possible) implementation of the procedure for resolving the conflicts. Unfortunately, this question reveals one of faults inevitable for a pilot survey we allowed an option avoiding the direct answer and eventually received more than 40% declined answers which sharply decreased the pool of valid answers, diminishing that way the validity of our conclusions.
Nevertheless, the results are challenging - the large majority – more than 58% of the valid cases believe that the procedure is well backed by the law and could not be avoided or blocked; almost 35% of the respondents believe that it implementation will be progressively improving and just less than 7% see serious obstacles before it. That could be interpreted as a general positive attitude toward the recent amendments in the legal framework.

Conclusions

The survey provided interesting data about the current status of corporate boards in Bulgaria:

1. They are rather small in size, close to the lower figures required by the law; managing boards being bit larger than others. Surveyed boards encompass relatively high educated and properly professionally qualified members. The rather small size suggests limited structure of corporate committees.
2. A considerable share of board members - on boards of directors approximating 50%, are certainly non-independent. They have frequently more than one “additional” relation to the company; those relations are more often connected to the large stake in the corporate ownership for the BD and SB, and to the placement in other boards, very often of affiliated companies for the MB.
3. Independent are considered about 1/3 of the board members, slightly lower for the MBs; that makes about 1 - 1.3 persons per board; the figure reflects the situation after introducing the board membership quota, but before the actual reconstruction of the boards.
4. The latter circumstance is important, since most of the companies do not have provisions in their by-laws offering opportunities for standing up independent opinions. True, there is a ground to expect that the number of such by-laws will rise soon.
5. In large majority of the observed boards, there is no overlap between their chairmen and the CEOs. That may be a good proof of separation of controlling from managing functions, in BD for example, but for the managing boards, that may mean, a possible shift in the nature, a resemblance to the boards of directors.
6. The survey showed that the respondents do not have a common perception for the influence of the shareholders over the boards – they spread almost equally among the 5 offered values. A majority of the respondents evaluate the influence of the managers and independent members over the board decisions as shared, and the others give slight prevalence to the executives.

7. While, a significant deal of companies assert, their boards as a whole and their CEOs particularly, are monitored regularly, that seems to be largely formal, as for reports before the GSMs, which are prepared by the boards themselves. Even the seminar meetings to discuss important corporate issues are irregular or exceptional.
8. A modest part of the boards have a practice to connect comprehensively the board members compensation to the firm's performance, though, again, the forms used for that seem quite simple – most frequently just some cash or much rarely - on the job benefits, with virtually zero dispersion of stock participation.
9. In the limited number of boards practicing monitoring of economic indices as performance benchmarks, the operational ones prevail and those connected to the shareholders value are neglected.
10. The survey showed little difference in the remuneration of the executive and non-executive members, which I tend to interpret like an undervaluation of the effort of the executives, rather than an overvaluation of that of non-executives. The boards are reluctant to disclose the absolute level of compensation and they seem to be sensible to accept broader discussion on the matter.
11. The latter is proven from the analysis of the corporate board committees; out of 83 total corporations with overall of 28 created committees just 2 reported committees on compensation of the board members and none on nomination and selection of executives.
12. The vast majority of the corporate boards committees are auditing and strategic planning, i.e. heavily connected to the operational management, and few cases have more than one committee. An interesting point, the average number of the members of such committees appeared to be larger than the average board, which is up to me, an indication that the current average size of the boards is an obstacle for more diversified set of functions and for creation of committees particularly. the number of independent board members in those committees is not significant yet.
13. Almost half of those committees are set on the grounds of their statutes, and another half are ad hoc created, without any regulation; the only case where they are created under a CG Best Practice Code is a plain exception.
14. The investigation of ranking and performing of the basic 7 corporate board functions, mentioned in the OECD CG Principles, showed clear preference, in terms of importance and time spent, to the most "basic", those connected with the operational management and with the general governance; the monitoring of the conflict of interests is definitely ranked last; close to it are functions on selection compensation of the executives.
15. An indirect proof of the latter result is incorporated in the regulation status of the surveyed functions; again the most frequently the companies by-laws explicitly list the operational functions and the least – dealing with the conflict of the interests.
16. The evaluation and self-evaluation of the boards from the survey tend to be modes with the marks between 3 and fourth of the 5 grade scale; highest marks are given to the auditing committees and to the operational functions.
17. The legal regulation of the conflict of interests concerning the board members is rather new and most of the companies does not experience and procedures

for dealing with those problems. Although, the majority of them see the legal regulation as good and believe that it will be well implemented gradually; moreover, the number of the cases where the issue is discussed is rising.

Shortly, the observed Bulgarian corporate boards show clear predominance of traditional structuring and functionality of their activities, targeted mostly on the operational management and the overall governance practice. Thus, they still miss that more or less diversified functionality typical for the highest present-day standards, though that reconstruction is already underway, with the latest radical amendments of the regulating framework.

SUMMARIES

András Inotai

EXPERIENCE WITH AND LESSONS FROM THE FIRST YEARS OF EU MEMBERSHIP – THE HUNGARIAN CASE

The accession of ten new countries to the European Union in May 2004 did not produce any major problem in the everyday functioning of the integration. At the same time, in the new members, no wonder happened either.
Most of the negative expectations linked to accession proved unjustified or mainly due to deficiencies in the preparation for membership. The article analysis the impact of accession on growth, inflation, employment, small- and medium-sized companies, regional development, budget and political sovereignty. The main conclusion is that eventual negative developments cannot be linked to EU accession but to home-made economic policy failures in the previous years. Of course, it is always easier to blame external factors, including now Brussels for own mistakes. In other areas, where membership created a new situation, the expected impacts could be identified well in advance (e.g. sovereignty).
A separate chapter deals with the two-year balance of accession. Trade with the new member countries shows a dramatic growth, particularly in exports. As a result, the traditional trade deficit turned to a substantial surplus within a period of two years, indicating the (regional) competitiveness of the Hungarian economy. The success of adjustment can be proved by the smooth transposition of EU directives and guidelines related to the internal market. Less promising were Hungarian developments concerning the main objectives of the renewed Lisbon agenda. In turn, Hungarians were successful in applying for higher positions in different EU institutions. Also, level and structure of utilizing EU funds can be considered satisfactory, excepting the delayed direct payments to farmers.
With membership, Hungary became a policy-shaper of EU decisions and politics. In the first years, however, this manouevring room has not been adequately used, since the traditional, historically rooted unilateral policy-taker behaviour and mentality could not yet be overcome. Another important problem is the deeply divided Hungarian society between two basic political parties and strategies that does not only appear in the different approach to global and European developments but seriously hinders the identification and implementation of Hungarian strategic interests in the enlarged European Union.
JEL: F15

Garabed Minassian

BULGARIA IN THE EU: THE CURRENT ECONOMIC STATE AND SHORT-TERM OUTLOOK

The confidence crash in the major financial institutions, the disastrous consequences of the discretionary monetary policies of the BNB, as well as the dramatic depreciation of the national currency created the preconditions for the search and the enforcement of a radical solution – namely, the adoption of the currency board arrangement (CBA). The outcome of CBA is connected with the appreciation in the real effective exchange rate. The only economic adjustment implies that the production should look for ways to keep and increase its competitiveness mainly along the line of higher efficiency and better quality.
Bulgaria's current account has been negative for almost all the period since 1990 (more than 11% in 2005). The good news is that the international foreign exchange reserves of the country have been steadily going up. Bulgaria has managed to keep remarkable budget

discipline after the adoption of the CBA. Recently, in search of incentives for economic growth there were some experiments with various tax structures.
In the conditions of Bulgarian economy the importance of the institutional factors for social and economic progress outweighs the others. The macroeconomic forecasts provide conditional projections – as a consequence from adopting one or another line of macroeconomic policy, or a given exogenous influence (for instance the dynamics of the domestic energy prices, of the major foreign exchange rates etc.), i.e. they study problems of the type "what – if". The employed simulation model is used within the framework of the LINK project.
JEL: E61; E63

Tamás Szemlér

MID-TERM ECONOMIC PROGRAMMES AND THE USE OF EU FUNDS IN HUNGARY

The paper provides an overview of the three main mid-term economic programmes of Hungary: the National Strategic Reference Framework (NSRF), designed for identifying the main development objectives and for the efficient use of (EU and domestic) financial resources, the Convergence Programme (CP), the fulfilment of which is crucial for getting closer to the introduction of the euro, and the National (Lisbon) Reform Programme (NRP) having macroeconomic, microeconomic and employment objectives to reach in order to modernise the economy and the society. The paper shows the most important linkages, contradictions and overlaps between the three programmes, stressing the need for permanent coordination. Ibudget corrections are in the foreground right now, but is crucial that they should be followed by real reforms: the CP foresees such reforms, and some of them are already designed and will be introduced as soon as in 2007. In the design of such reforms, the NSRF and the NRP have a very important role. Hungary should not handle any of the above programmes as just "homeworks ", which can be solved by the creation of a certain amount of official papers, because the implementation of these programmes is of crucial importance for the economic and social development of Hungary in the coming years.
JEL: E65

Judit Szilágyi

THE FEASIBILITY OF THE HUNGARIAN CONVERGENCE PROGRAMME

The paper provides on overview of the Hungarian Convergence Programme (CP) that envisages the path to restore macroeconomic equilibrium during the next three years. The spiralling budget deficit in 2006 made an update of the previous CP inevitable. In the September 2006 version the government shows strong commitment to face up to the fiscal imbalances and structural problems, yet several aspects question the feasibility of the Programme. The paper focuses on the evaluation of the major objectives and elements of the CP as well as on significant technical assumptions and external factors that may constitute a downside risk for the implementation. Besides introducing a corrective fiscal package the Convergence Program draws the outlines of several, long-awaited reforms of almost the entire sphere of the social welfare systems. As the primary focus is on the feasibility of the budgetary consolidation strategy, the paper deals with these reforms only in the context of the long-term sustainability of public finances.
JEL: E63

András Székely-Doby

FOREIGN INVESTMENTS AND ECONOMIC CATCHING UP: THE CASE OF HUNGARY

Both economic history and theory show us that foreign capital is indispensable in the process of modernization. Countries in Central and Eastern Europe in the late 80s were facing an extremely challenging double task: they had to transform both their political and economic systems. Despite the difficulties most of them tackled all the problems with remarkable success, creating the bases of market economies and democracies simultaneously. Rapid privatization and institution building signed the way of Hungary, the first mover in the transition process, and – as a consequence – strong capital inflow (mostly FDI) occurred. The domination of MNCs has become evident by now, and outward investments began to rise, too. In this paper we analyze foreign direct investments in Hungary, the activities of multinational companies, and the characteristics of outward investments in the last two decades.
JEL: F23, G31, G38

Andrea Szalavetz

CHANGING NATIONAL INNOVATION SYSTEMS IN ADVANCED ECONOMIES – LESSONS FOR CATCHING-UP FOLLOWER COUNTRIES

This paper presents the results of a research project undertaken at the Institute for World Economics that focused on changes and institutional innovations in advanced economies' National Innovation Systems. These changes were provoked either by emerging new technologies or by changes in the outside environment that made the reform and the transformation of the institutional system necessary. We tried to identify the factors that provoked changes in the system, as well as the direction of these changes (whether different countries have carried out identical or similar changes). We also investigated the methods, the changes have been accomplished.
The three topics surveyed are the following: institutional centralization; innovation financing; and demand-oriented innovation policy as a complement to the usual supply oriented analyses.
JEL: O31; O32

Rossitsa Chobanova

INNOVATION PERFORMANCE AND CHALLENGES TO THE BULGARIAN INNOVATION POLICY

Innovation is the main driver of knowledge based growth of modern economy. That is why the improvement of innovation performance becomes a core of economic policy.
On the base of benchmarking innovation performance of the Bulgarian economy using the European innovation scoreboard data the paper identifies main challenges to the national innovation policy. Among them are: to foster the overall R&D funding base; to initiate a recovery of R&D in the business enterprise sector; to strengthen the human resource base; to enhance the interactions between the actors of the science, technology and innovation system. In this respect the following questions, concerning innovation policy mix are discussed: What are the main objectives and priorities of R&D policy in the country? Is there a gap between the challenges and the main objectives and priorities? Which policy

instruments are in place today aiming at affecting R&D activities in the private and in the public sector? What are the instruments outside the R&D domain which are of particular relevance to R&D activities and the development of R&D expenditures? Is there a gap between the main policy objectives and priorities, and the instruments in place? What are the most important policy instruments that affect R&D expenditures? How does the governance of the system of R&D policy instruments take place, and is there a form of co-ordination between R&D policy and policy instruments from outside the R&D domain? Is there any evidence for interactions among the policy instruments in place with respect to affect R&D expenditure?
JEL: 025, 038,052

Gábor Túry

REGIONAL DISPARITIES DURING THE TRANSITION: THE NEW SPATIAL STRUCTURE IN HUNGARY

If not in the regional differentiation process of the last one-and-a-half decades then definitely in the area of decisive processes can we can talk about a change. This change generated a new spatial structure, which also indicates a new economic and social spatial structure and a regional restructuring of settlements.
Individual regional development paths determining the new spatial structure display a high degree of regional differentiation in terms of development indicators in individual regions. Growth and decline at macro level determined by economic cycles diverge regionally to a substantial degree, and in some cases these divergences are extreme. Certain regions react more promptly than others to circumstances changed by economic cycles. This is not just due to the different regional dynamics but also to the 'inherited' sectoral structure and the government's development policies. Based on experience in the 1970s and 1980s we come to the conclusion that the mono-cultural production structure shaped by a mono-sectoral development policy implies several risks at regional level, as does supporting investments taking no heed of the amounts or nature of the assistance.
JEL: P25

Nikola Vulchev

QUALITATIVE EVALUATION OF THE AGRICUTURAL ENTERPRISES' MANAGERS IN BULGARIA

The paper discusses the state of the development of the labor resources in the agriculture of Bulgaria. Main tendencies are drawn for it, outlining that the changes after 1989 provoke substantial changes in their quantitative and qualitative dimensions. The focus is on the qualitative characteristics of the agricultural enterprises' managers – of private and corporate type. On one hand, the sustainable decrease of the absolute number of the employed in the branch, the worse age reproduction structure of the agricultural population, the unfavorable educational structure and the unfavorable business environment for development of the agricultural activity influence adversely. On the other hand, the registered positive results in the economies with size over 100 decares used agricultural land give reason to draw the optimal conclusion that the large enterprises, producing for the market, possessing agricultural equipments and employed agricultural workers, are managed by considerably young managers with suitable agricultural education.
JEL: Q13

Tamás Novák

DEVELOPMENT OF SMALL AND MEDIUM-SIZED ENTERPRISES IN HUNGARY

This paper aims at giving a snapshot on the major trends of SME development in Hungary. After a brief historical background, the focus is put on the current changes taking place in the Hungarian enterprise policy. A major transformation is underway in the SME financing as a result of the substantially increasing EU funds available for enterprise development. This process is also supported by the favourable competition policy rules applicable for the SME sector in the EU. These changes are also supported by the increasing competition between commercial banks for financing possibilities, the target group of which policy is the SME sector. Besides, the concentration of the SME support system with the aim of increasing effectiveness of state subsidy for SME sector is also carried out.
JEL: F15, L21, L25

Plamen D. Tchipev

MOULDING CORPORATE BOARDS: A KEY CHALLENGE OF BULGARIAN CORPORATE GOVERNANCE?

The modern corporate governance structure in any country includes as its key factor the structure and functionality of the corporate boards. Currently, the boards experience a more or less radical change of their traditional activities and structure, acquiring new features and diversifying the old ones in order to answer of the raised demand before them by the business and social communities. The paper is revealing the status of the problem in Bulgarian companies within the immediate pre-accession period; it is based on a companies' survey selected from the main economic sectors. And, the main findings show an inclination of the current boards toward more traditional functionality and conservative structuring, i.e. the boards concentrate more in terms of time and quality to the traditional functions as overall governance and/or operational management and adopt appropriate structures. This also means that the surveyed boards are more reluctant of dealing with the functions like resolving of conflicts of interests and more flexible structuring as creating specialized committees, especially when things come to the nomination and compensation of the board members. Hopefully, the recent amendments of the legal framework in the field will provoke a restructuring and diversification of board functionality toward the highest present-day standards.
JEL: G32, G34, G38, K22