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IS BULGARIAN ECONOMY OVERHEATING?

This article presents Bulgarian economy situation by 2008, analysed in terms of some evolving inner tensions and disbalances. The individual elements' dynamics of GDP is traced in the first part, illustrating how the economic expansion of the last decade is to be attributed to the imports of goods and services. GDP growth is predetermined by domestic demand. A steady overtaking growth at a sectorial level is recorded by an element called "*adjustments*" which is filled by indirect taxation. The fastest growth in the sector of industry is due to construction whereas in the services sector – to financial mediation. Such a discordance could not continue in the future, so structural adjustments linked to the overall tuning of the economy, are both possible and probable. The second part of the article studies the changes in inflation rates, employment and income. A clear positive trend of inflationary pressures emerges, which is in line with the positive development of real income of households per capita. Material and financial resources are tied up in unproductive projects which pushes domestic demand further but the latter is not met structurally by a corresponding supply. The subject of the third part is financial mediation. The lending provided by the banking system is still being held at an unreasonably high level which does not correspond to the structural characteristics of demand. In the end some conclusions are drawn for the inner structural tensions building up in the economy, accompanied by intensifying disequilibrium. There has been made an attempt to formulate adequate macroeconomic management policies with a view to preventing serious economic and financial failures from happening as a result of the overheated to a certain extent Bulgarian economy.

JEL: C82; E01; E27

Generally, economy is described as overheated "*... when a prolonged period of good economic growth and activity causes high levels of inflation (from increased consumer wealth) and inefficient supply allocations as producers overproduce and create excess production capacity in an attempt to capitalize on the high levels of wealth*".[1] The production structure is being detached from the structure of demand by creating production capacities enabling investors to capitalize on profits and build up a fortune given the circumstances. A similar definition refers to overheating of the economy as an economic situation where factors are becoming out of control so that there is an increase in bank borrowing. The economic and financial assessment of the future becomes inadequate, investments are channeled to inefficient production structures, employment (income respectively) increases but the goods cover supplied deviates from the growing solvent demand. There is an overstrained growth of borrowing, stronger pressure on prices and salaries, domestic

[1] Investopedia, A Forbes Media Company (Internet).

demand is redirected increasingly to imports (imports start growing) while exports lag behind.[2]

Overheating the economy is usually accompanied by the emergence and maturing of some peculiar financial *"bubbles"*, connected to the price boom of certain financial assets. Literature distinguishes three phases in their development.[3] *The first phase* begins with accelerated borrowing either as a result from banking lending or liberalizing banking lending, because of the deliberate policies of the central bank (more lax monetary policies) to boost economic growth. The outcome leads to the price increase of certain assets, for example of real estate. During *the second phase* (usually a short period) the bubble bursts, assets prices tumble down, things sober down. *The third phase* is characterized by the failure of companies and individual economic agents who had afforded borrowing huge amounts of money to invest in dubious assets looking for quick profits. There is triggered a process of an overall restructuring of the economy in the search of a new equilibrium.

The world economic history has met with many cases of overheated economies followed by painful recovery. The Japanese financial bubble of real estate and the quotations on the stock exchange are one of the most recent examples in the early 90s of the 20th century. Financial liberalization in Japan in the 80s brought about credit expansion. During the second half of the 80s of the XXth century the index Nikkei 22 grew four times, paralleled by inflation rates. The cooling policies carried out by the Japanese central bank, aimed at curbing inflation, were accompanied by tighter monetary restrictions and raised interest rates. The bubble burst and there was a double collapse of the quotations on the stock exchange. This was followed by a process of economic rehabilitation which stopped economic growth. Then the ever present big financial speculators either failed or celebrated.[4]

This type of inefficiency and innate disequilibrium undermines the foundations of economic growth and provokes recession.

Under a typical central bank operation interest rates in the overheated economy start going up as a result of the deliberate monetary policies aimed at cooling investors, cooling investment activities and thus impose the necessary healing macroeconomic equilibrium.[5] Under a currency board arrangement

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[2] *Klein, G.* Dictionary of Banking (Second Edition). Pitman Publishing, 1995, p. 225.

[3] *Allen, F., D. Gale* . Comparing Financial Systems. The MIT Press, 2000, p. 295.

[4] In December 1994 for instance the multimillionaire G.Soros declared losses of USD 600 million as a result of poor assessment of the strength of the Japanese yen. This loss was presented as one of the largest losses from financial speculation in the world by the Guinness Book of Business Records (*Cannon, T.* The Guinness Book of Business Records. Guinness Publishing, 1996, p. 168).

[5] It is worth noting that from June 2004 to July 2006 the Federal Reserve raised its own interest rate 17 times trying to gradually cool the overheated economy of the USA.

(CBA), however, the Bulgarian National Bank (BNB) is unable to regulate interest rates so it has to resort to other macroeconomic management tools.

The economic situation in Bulgaria by 2008 is described by:

1. Economic growth

For over a decade Bulgarian economy has recorded a positive GDP growth with an average annual real rate of over five percent. In terms of time the growth rates varied but slightly, which reduced uncertainty and increased optimistic expectations[6]. Following two deep "*divings*" in the negative zone (in the beginning and the middle of the 90s of the 20th century) the rate of GDP real growth in Bulgaria settled steadily in the positive 5-6 – percent area (Figure 1). For 1998-2007 the real GDP grew by almost two thirds!

The decade 1998-2007 will be remembered in Bulgaria's most recent history by its "*quiet*" economic revolution. GDP was ascending steadily and firmly even when the economies of the main foreign trade and economic partners from the EU were suffering from the lack of sufficient initiative and economic progress. Economic theory says that if the main trade partners of a specific country go through an economic recession, the latter will also be forced to shrink its own economic activities. The average rate of GDP growth of the euro area for 2002-2006 was 1.6%, whereas for the CEE countries – 5.6% (5.7% for Bulgaria)[7]. Such a divergence of economic growth suggested that the CEE countries had great economic potential after breaking the chains of central planning. What was conditionally called *pre-crisis* level of GDP of 1989 in Bulgaria was reached in 2005 and exceeded by five percent in the following year.

The picture of structural elements of the GDP growth is contradictory though (in terms of comparable prices, Figure 2). All the three main positive components of GDP (final consumption, gross capital formation and exports) grew faster than GDP. Financing their growth was provided by the only negative GDP component – the imports. It is embarrassing that finally it has been imports that went on providing the resources required for the GDP components growth of the very GDP respectively. Economic rationale suggests that such a relationship cannot be a lasting one, it creates tensions and misbalances in the economic and consumption structures, which will have to change in the future. A steady engine of economic progress can only be the internal factors for economic development.

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[6] The data in this part was taken from Main Macroeconomic Indicators. NSI, 2006 and Annual Report 2007. BNB, unless another source was mentioned.

The volatility of the GDP growth rates in Bulgaria, measured by the average standard deviation for a five-year period was less than that of the CEE countries and higher than that of the euro area countries (see World Economic Outlook. Housing and the Business Cycle. April 2008, IMF, Table A2, Table A4).

[7] World Economic Outlook. Globalization and Inequality. October 2007, IMF, Table A2, Table A4.

Figure 1

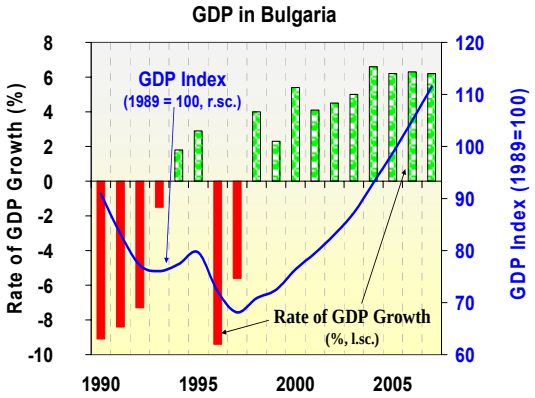


Figure 2

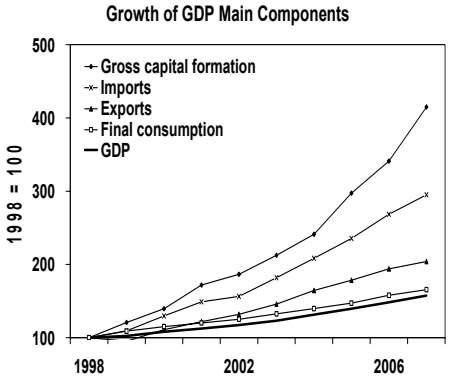
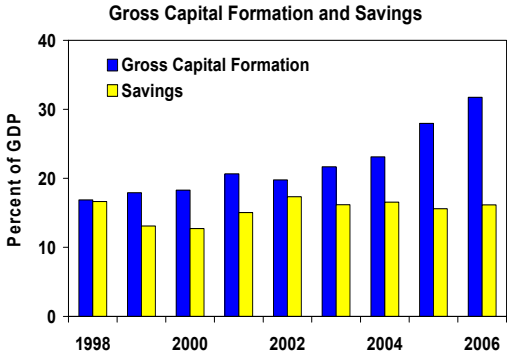


Figure 3



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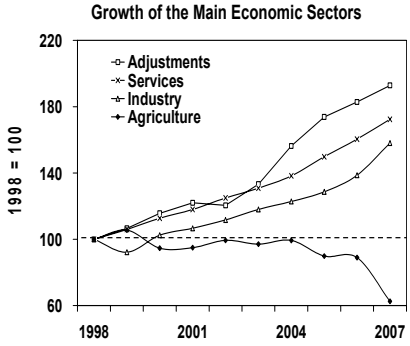


Figure 5

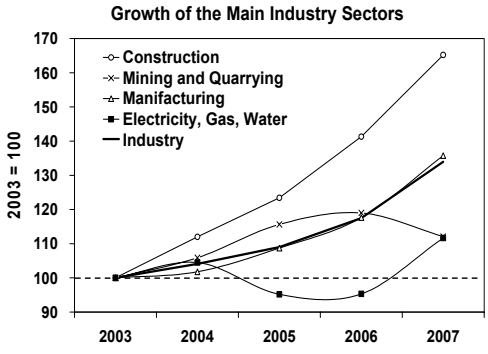
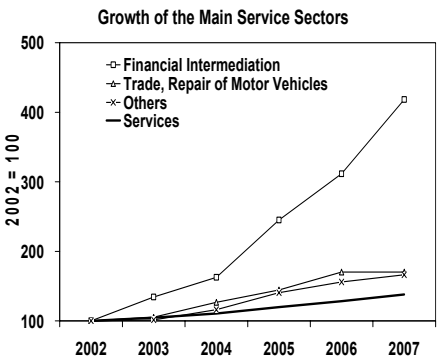


Figure 6



This specificity was expected as far as after the disastrous economic developments of the mid 90s of the XXth century the country badly needed a radical restructuring of its production capacities. It was only made possible by the decisive support of imports from the technologically advanced countries. It is necessary, however, for the economy to adjust and to create its own production structures which will enable its successful economic integration into the EU. Reality shown on Figure 2 demonstrated that it was rather the economy that has adjusted to the permanent external financing but it has not manageded so far to develop its own economic potential.

There has been an especially rapid increase in gross capital formation (GCF). The ratio of GCF to GDP has reached exceptionally high values - 36.7% in 2007 (Figure 3). Such a high level of GCF does not meet the relatively timid rates of GDP growth. This situation reminds us of the years of accumulation as an end in itself during the so called socialist period in Bulgaria. The relative level of savings has lagged far behind – it has remained steady at about 15% of GDP. People and economic agents do not seem to show a great interest in saving but investment activities have grown almost without restraint. They are in line with the high rates of imports growth, with the aggressive lending policies provided by commercial banks as well as the inflow of foreign financing into the country in terms of direct foreign investment, of private foreign debt and EU grants.

The combination of high relative GCF from the one hand, and timid rates of economic growth on the other hand has revealed the low efficiency of investment. Under market economy relationships and private ownership of the means of production this combination is only possible when the economic and financial assessment of reality is not adequate and investment is channeled into unproductive activities. This is the massive unproductive construction, mainly in the form of very expensive buildings of little function, more as a form of investment expecting a lucrative use of financial resources under the present feelings and conditions rather than made because of urgent social and production needs.

The combination of high investment activity on the one hand and relatively low rates of real GDP growth on the other hand is possible too, when a significant part of the new investment in some production remains unrecorded, i.e. *"the shadow economy"*. This is typical of construction when the real values of sales substantially exceed what is declared. The latter is due to the poorly functioning institutions, since real sales have been reported at substantially lower, artificial price levels. This is how speculations are encouraged in sales of real estate, allowing a high rate of return on this type of investment and deliberately or not nurturing expectations for a lasting rent without any risk. At the same time the reported GDP value is being artificially reduced and real proportions distorted.

A GDP engine in terms of its sectorial components is the surplus over the gross value added (GVA), conventionally called "*Adjustments*" (Figure 4). Its

elements are: (1) Net taxes on products; (2) Value added tax; (3) Import duties. The subsidies on products, which account for about a third of all subsidies (2005) are deducted from tax on products. The "*Net taxes on products*" matches the earnings from excise in the government budget so the item "*Adjustments*" is filled up from indirect taxation. This type of taxation involves all the population and is not included in the production price of goods and services provided (unlike direct taxes).

The relative share of "*Adjustments*" in GDP grew from 10.6% in 1998 to 18.3% in 2006. Keeping high indirect taxes at the expense of direct ones is quite convenient for the bureaucrats in the Ministry of finance since indirect taxes are more easily collectable. The curves of Figure 4 revealed that moreover, carrying out a similar policy has distorted the sectorial structure of the GVA and the GDP. If we imagined that there were no indirect taxation at all, then GVA would equal the GDP, i.e. all taxes on goods and services and their production would be calculated in their production price and would influence the solvent demand while the market would give some more adequate signals to supply.

Services' growth has been exceeding that of industry and agriculture. A fast growth has been observed from the services sector in the field of financial intermediation, trade and car repair. The sector of services, namely financial intermediation has recorded an exceptional growth (Figure 6), which correlates with the aggressive lending policy of commercial banks over the last years. Services have been overtaking while the rates of increase in the productions of goods have been much more restrained. The sharp plunge of GVA in agriculture for 2005-2007 was significant, especially in 2007 (almost 30%). The latter, however, has not affected significantly the rates of growth of the whole (GDP), since its relative share was comparatively smaller and went on shrinking – in 1998 the GVA share, generated in agriculture and forestry, accounted for 17% of GDP, whereas ten years later the same share fell back to five percent. This type of structural characteristics is typical of developed countries with Bulgaria gravitating to them.

The changes in the sector composition of industry can be considered unfavourable (Figure 5). The most dynamic industry sector has been construction, which logically matches the rate of accumulation. The growth of the other of industry sector elements has been more modest while the GVA of electricity generation, gas and water has been even falling. The latter might be a positive development as far as it correlates with the more efficient use of energy resources. Such changes, however, do not belong to a sustainable structural equilibrium (i.e. the dominant rates of growth of construction cannot continue for very long), which suggests a probable downturn in the sectors development of industry in the near future.

The assessment of factor contribution for the economic growth recorded complements the picture. R. Sollow's research demonstrated that the process

of saving and investment as an end in itself is not decisive for economic growth. A different type of savings leads to different rates of growth of GDP (per employed). This raises the issue of the contribution of the scientific and technical progress materialised in the capital in the formation of the economic growth rates. To be more precise, he came to the conclusion (which was mentioned in his Nobel lecture too) that "*... the permanent rate of growth of output per unit labour input is independent of the saving (investment) rate and depends entirely on the rate of technological progress in the broadest sense*".[8]

The well known *Cobb-Douglas* production function was used to this end:

$$\mathbf{Y = A \,.\, L^{\alpha} \,.\, K^{\beta} \,.\, e^{\gamma t}},$$

where **Y** is GDP, **A** – the scales coefficient, **L** – employment (labour), **K** – capital, α - elasticity of GDP subject to employment, β - GDP elasticity subject to capital, γ - impact of scientific and technical progress (Total Factor Productivity - TFP).

The assessment of the production function coefficients of Cobb-Douglas is worked out in accordance with the equilibrium approach.[9] The elasticity of GDP subject to employment is equaled to the share of salaries and other revenue in the GDP, and the elasticity of GDP subject to capital – to the share of profit (operating surplus) in GDP.

$$\frac{\mathbf{I}}{\mathbf{K}} = \left(\frac{\mathbf{I}}{\mathbf{Y}}\right) / \left(\frac{\mathbf{K}}{\mathbf{Y}}\right) = \frac{\mathbf{GCF / GDP}}{\mathbf{Capital - output\ ratio}}$$

Information about the production function elasticities assessment is provided from the GDP composition, worked out by the income method.[10] The

[8] *Solow, R.* Growth Theory (an Exposition). Oxford University Press, 1987, p. xii.

[9] The technical details in assessing the coefficients of the production function under the Bulgarian conditions can be found in *Minassian,G.* Financial Programming. Sofia: Gorex Press, 2004, 8.1.2., in bulgarian.

Using the Cobb-Douglas production function for economic analyses and forecasts comes across some problems from the theoretic points of view. There are extensive and some well grounded criticisms to the hypotheses laid out in the formulation of the production functions of the above type (*Rangelova, R.* A Criticism of the Concept and Measure for Total Factor Productivity. - Ikonomicheska mis'l 2008, N 3, in bulgarian). The theory has not found a better alternative way for the explanation of the quantitative factor impacts. Because "*... one cannot do macroeconomics without aggregative relationships*" (*Solow, R.* Op. cit., p. xx).

[10] Using the ratios in the GDP balance, worked out by the income method, elasticities are assessed in *Tsalinski, T.* Two approaches to estimating the potential output in Bulgaria. BNB, DP/57/2006, 15 p. The estimates overvalue the contribution of capital and undervalue the contribution of labour. This type of ratios are typical of exceptionally underdeveloped countries. For example, according to the UN estimates for a number of countries in Africa the share of capital is given as 0.39, and for labour 0.61 (Economic Report on Africa 2007. UNECA, Addis Ababa, 2007, p. 164). Modern research of economic interrelationships in the euro area consider the ratio of elasticities to be 0.70 : 0.30 in favour of labour (*Smets, F., R. Wouters*. An Estimated Stochastic Dynamic General Equilibrium Model of Euro Area. ECB, WP N 171, Aug 2002, p. 22). The

latter, however, as present in the Bulgarian official statistics, is not reliable – it is worked out *post factum*, as a residuum. What is considered in addition is only the primary distribution of income, while redistribution remains unaccounted for. With a view to taking into account the secondary redistribution of salaries and profit it is advisable to use the GDP composition by elements of final expenditure approach, i.e. elasticity β to be made equal to the share of GCF in the absorption.

The ratio of both elasticities α and β varies between 0.75 : 0.25, but for less developed economies it might go even to 0.90 : 0.10.

The measure used for **L** in the production function is usually number of employed in the economy. Provided there is enough reliable data, then the indicator number of hours worked can also be applied.

The estimate of capital **K** is problematic. Under a centrally planned economy **K** was made equal to the basic production funds. After the 80s of the XXth century, however, the national statistics discontinued recording this indicator.

It is possible to obtain a relatively reliable estimate of the growth rate of capital ***k***. Most generally, the latter can be recorded as follows:

$$\boldsymbol{k} = \frac{\Delta \boldsymbol{K}}{\boldsymbol{K}} = \frac{\boldsymbol{I} - \lambda.\boldsymbol{K}}{\boldsymbol{K}} = \frac{\boldsymbol{I}}{\boldsymbol{K}} - \lambda$$

where **λ** stands for the rate of depreciation.

If we take into account the equation, then

$$\mathbf{k} = \frac{\mathbf{GFC / GDP}}{\mathbf{Capital - output\ ratio}} - \lambda$$

Usually the capital intensity of GDP is about 2.5, i.e. the capital exceeds the GDP 2.5 times. This ratio is not strictly fixed but the estimates about past periods for Bulgaria converge to the accepted proportion.[11]

The average estimate of the capital intensity value is conventional to a great extent. It is not and cannot be a fixed value. The capital intensity growth is determined as a relationship between the GCF and the GDP. It can be used as an indicator of the nature of the changes in it. The average capital intensity in a market economy should gravitate to the marginal capital intensity. During the first half of the 90s of the 20th century the situation in Bulgaria was radically different

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estimate of the factor contributions to the GDP growth for the countries of CEE from the first decade of the XXIst century is adopted without any explanations to be the universal ratio of elasticities of 0.65 : 0.35 (*Schadler, S., A. Mody, A. Abiad, D. Leigh.* Growth in the Central and Eastern European Countries of the European Union. IMF, OP N 252, 2006, T. 4.2).

[11] Capital intensity in the euro area in a study of the ECB is taken as 2.2, given a number of simplifying assumptions without producing any arguments as evidence (*Smets, F., R. Wouters.* Op. cit.).

with the substantial structural adjustments taking place but having seen economic processes returning to normal (after the introduction of the CBA and hence forward) such a convergence is logical to happen. The average value of incremental capital-output ratio in Bulgaria over the last years came about to 2.6 (Table 1), which is close to the accepted value and does not have a great influence over the final estimates.[12]

Table 1

Incremental Capital-Output Ratio (current BGN million)

Years	GDP	GDP Growth (ΔGDP)	Gross Capital Formation	Incremental Capital-Output Ratio	Incremental Capital-Output Ratio (a two-year average)
1999	23 790	1369	4262	3.1	
2000	26 753	2962	4894	1.7	2.4
2001	29 709	2956	6141	2.1	1.9
2002	32 402	2693	6405	2.4	2.2
2003	34 628	2226	7511	3.4	2.9
2004	38 823	4195	8976	2.1	2.8
2005	42 797	3975	11 971	3.0	2.6
2006	49 361	6564	15 667	2.4	2.7
2007	56 620	7259	20 798	2.9	2.6

The rate of depreciation of the national economy level λ is subject to a rough estimation too. Here one should take into account the need for an accelerated replacement of capital and the major equipment. The acceptable value is five percent per year.[13]

It is premised that this is a production function with constant returns to scale ($\alpha + \beta = 1$). The values of α and β were worked out from the GDP presentation by the final expenditure method, leaving out the foreign trade balance (i.e. the final consumption's share and the share of GCF in the absorption were estimated, Table 2). The indicator l_t denotes the growth rate of employed in the economy. The growth rate of capital k_t was calculated as a quotient from the rate of accumulation and the capital intensity 2.5, deducting the rate of amortization of five percent. The TFP γ was estimated as a residuum in accordance with the production function, presented as a relationship between the GDP growth rates, employed and capital.

[12] *Minassian G.* Op. cit., 6.2.2.

[13] The IMF takes capital intensity for a number of countries from South East Asia to be between two and a half and three and discusses two rates of amortization – five percent and seven percent. In the case of seven percent the rate of amortization of the capital intensity falls by about a fifth (World Economic Outlook, IMF, 2005, p. 121). An ECB study is based on an annual amortization rate for the countries of the euro area of 10% (*Smets, F., R. Wouters.* Op. cit., p. 22).

Table 2

Production Function Elasticities

Years	Final Consumption (million BGN)	Gross Capital Formation (million.BGN)	Absorption (million BGN)	Share of Final Consumption (α, %)	Share of Gross Capital Formation- (β, %)
	1	*2*	*3=1+2*	*4=1/3*	*5=2/3*
1998	18 585	3785	22 370	83.1	16.9
1999	20 801	4262	25 063	83.0	17.0
2000	23 291	4894	28 185	82.6	17.4
2001	25 818	6141	31 960	80.8	19.2
2002	28 894	6405	35 299	81.9	18.1
2003	30 922	7511	38 433	80.5	19.5
2004	34 070	8976	43 046	79.1	20.9
2005	37 742	11 971	49 713	75.9	24.1
2006	42 964	15 667	58 631	73.3	26.7
2007	48 209	20 798	69 007	69.9	30.1

Given these assumptions and values of the main indicators the following values of the TFP γ for Bulgaria were obtained (Table 3).

Table 3

Total Factor Productivity (γ), (percents)

Years	α	β	y_t	l_t	k_t	γ	γ (a two-year average)
1998	83.1	16.9	4.0	-0.2	1.8	3.8	
1999	83.1	16.9	2.3	-2.1	2.2	3.6	3.7
2000	82.6	17.4	5.4	-3.5	2.3	7.9	5.8
2001	80.8	19.2	4.1	-0.4	3.3	3.8	5.9
2002	81.9	18.1	4.5	0.4	2.9	3.7	3.8
2003	80.5	19.5	5.0	6.3	3.7	-0.8	1.5
2004	79.1	20.9	6.6	1.9	4.2	4.2	1.7
2005	75.9	24.1	6.2	0.8	6.2	4.1	4.2
2006	73.3	26.7	6.3	2.9	7.7	2.1	3.1
2007	69.9	30.1	6.2	2.0	9.7	1.9	2.0

Source: The initial data for determining α *and* β was taken from Main macroeconomic indicators. NSI, 2006. The data for 1998-2005 are final and for 2006-2007 – preliminary.

The estimates of α and β should be taken with reserves. There exist some conventionalities which cannot be directly accounted for quantitatively. It is assumed that there is a constant return to scales of production, which is arguable. In a real economy the increasing return to scales is not simply a fiction – increasing the scales of production result in economies obtained both along the line of technological and management innovations. Taking into account this particularity will reduce some of the TFP and will materialize it to the respective specific factor. Despite that, however, there are no grounds to expect any changes in the estimated trend of TFP, which is being discussed here. The evaluation of the capital's contribution through its share in the absorption might also be subject to doubts. The theory points out that the estimate of GDP elasticity subject to capital (β) econometrically is as a rule higher than the one worked out by means of the equilibrium method. An analysis of quality of the situation in question, supplemented by the specific expectations, should be directed to adopting a given point of view.

The data of Table enable the evaluation of the contribution of the individual factors of GDP growth. The values of TFP γ are pretty chaotic, which reflects the inconsistency of economic reforms in Bulgaria. The average annual GDP growth for 1998-2007 stood at 5.1%, employment grew by an annual average of 0.8%, while capital increased on an annual average by 4.4%. The average GDP elasticity subject to employed was 79%, and to capital – 21%. Under these circumstances the TFP accounted for 3.4% annual growth of GDP, i.e. two thirds of the GDP growth, the extensive growth of employment – for about 13%, while the extensive capital growth – for about a fifth.

The relative high values of TFP are typical of the CEE countries for the period in consideration. They resulted from the inherited inefficiency of economic structures during the so called socialist way of development and had to be amended. After the shakeout of the artificially maintained inefficient types of production there came the time for innovation to enter. The change of the system of economic management enabled technological and managerial renovation, which no doubt reflected on the level of TFP.[14]

It is the year 2003 that stands out of the generally speaking easily accounted values in the proportions in Table . During 2003 a negative growth of TFP was recorded. It resulted most of all from the upturn in employment. The official statistics revealed that from 1996 to 2001 the number of employed in the economy was gradually diminishing, with their average annual number in 1996 being 3286 thousand people, and in 2001 by 318 thousand employed less. In 2003, however, there was a marked upturn, with the average annual number of employed growing on the previous year by 188 thousand people.[15] This increase came about as a result of the normalisation of developments in the country, the increase in the

[14] A similar conclusion was drawn by *Schadler, S. et al.* Op. cit.).

[15] Statistical yearbook. NSI, 2006, p. 4-5.

overall predictability of economic environment and last but not least – the programmes to encourage employment which had a significant impact on the public sector. Thus for example, the employed in the services sector "*Other activities in the service of society and the individual*" rose in 2003 by 71%.[16] This increase in employment was not able to immediately provide a respective increase in the GDP, therefore the TFP for 2003 went down.

Since 2002 a process of accelerating rates of capital growth has begun, which is in harmony with the changes in the rate of accumulation. The capital employed in the economy grew but its contribution to the TFP has remained modest.

A better and more adequate contribution of the TFP can be obtained from its average figures for a two-year-long period. Then its downward trend over the last years becomes clearer. In 2005 especially, the contribution of the two-year smoothed scientific and technical progress was estimated at 4.2%, in 2006 – to 3.1% and in 2007 – to two percent. For each of the last two years the share of the scientific and technical progress fell by 1.1 percentage points! This type of development describes a kind of technological shock which might give rise to an economic cycle.[17] It is the result and reflection of the process of the continuing inefficient distribution of investment resources in the sectors which are not creating the GDP. This type of disparity should be amended in the future.

The vacuum created by the shrinking TFP was taken (offset) by the greater and greater involvement of labour and material resources in production. On the surface an increase in the investment mass and decrease in unemployment is being recorded. Or, if we apply the forgotten terminology of the socialist period in Bulgaria, we have to state that there is an expansion of the extensive factors' contribution in providing for the GDP growth at the expense of the intensive ones.

Logically and historically the extrapolation of such a type of economic development brings about unfavorable projections. Let us recall our own economic history of two decades ago when a key issue for the ruling party elite was intensifying the economy. The foundations of economic growth are in its intensive component. Compensations in the short-term might be found out (in terms of automatic stabilizers), which in the long-run cannot stay the course. A structural shakeout will have to take place. This is unavoidable, a necessary evil.

The causes for the unfavorable structural factor composition lie in the nature of the investment process. The shrinking intensive component means that labour and material resources are involved in activities and production that lack any future, contain low technological and managerial innovation. Their participation in the GDP's sectorial composition reveals which exactly they are – above all construction and financial intermediation.

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[16] Main macroeconomic indicators. NSI, 2006, T. 3.2.3, 3.2.4.

[17] *Kydland, F., E. Prescott* (Time to Build and Aggregate Fluctuations. - Econometrica, 1982, Vol. 50 (6), p. 1345-1370) argued that technology shocks were central to understanding fluctuation.

The investment horizon has been brought too close. The shortsightedness demonstrated by investors can only mean but one thing – the search for easy profits is dominant and there is a lack of plans for a long-term presence on the production landscape. For the efficient realisation of the rough drive for making money in the short run there must be an appropriate institutional environment available – legislation of poor quality that can be broken, opportunities for corruption and sleaze, passive and formally held regulatory procedures.

As a whole the period under consideration is said to have recorded consistent positive growth rates but simultaneously there were created conditions suggesting the emergence and development of peculiar economic and financial disbalances which should not be neglected.

2. Inflation, income, employment

Over the last five years inflation in Bulgaria has had a clearly positive trend (Figure 7). It has markedly risen since the mid 2007 mainly because of the high increase in food prices. The latter has been a global phenomenon, especially and above all due to its combination with the subprime mortgage crisis in the USA and other developed economies, but it has had a substantial impact in Bulgaria too. If we have a look at the situation in the newly accessed countries to the EU, Bulgaria is leading in terms of price growth (Figure 8),[18] especially if the accumulation of inflationary potential is taken into account.

The general level of consumer prices in Bulgaria is still significantly lagging behind the European average (by 2007 it still accounted for about 40%). The country's integration into the EU implies a trend of price gravitation, although a real smoothing might only happen if a comparable level of social and economic development has been reached. The accession of Bulgaria to the EU has removed the barriers to any spillover effects and on the principle of interconnected vessels it is normal to expect a stronger external (European) impact along the line of price pressure. The problem does not lie in the higher inflation rates in Bulgaria compared to the EU (which will be observed at least in the mid term), but in the speed of the maintained price increase.

Given a fixed foreign exchange rate (the CBA) the overtaking inflation in Bulgaria compared to the EU has given birth to an unfavorable tension in the production structures by two channels. *First*, it has lowered the local exports' competitiveness on the global (European) markets since it raised the prices of local export goods and services. *Second*, it has increased the competitiveness of imported goods and services on the local market – imports become more accessible for local consumers. The economy should be able to deal with this double pressure (mainly and most of all by raising efficiency), otherwise the outcome is economic recession and devaluation of the local currency.

[18] The data is from Eurostat (Internet).

Figure 7

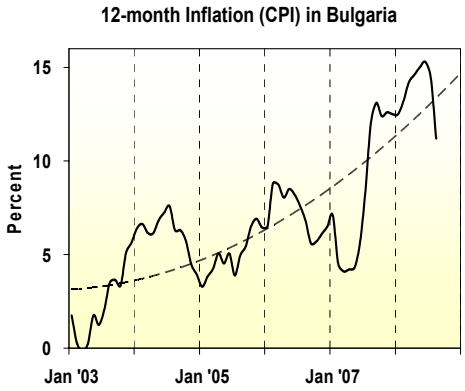


Figure 8

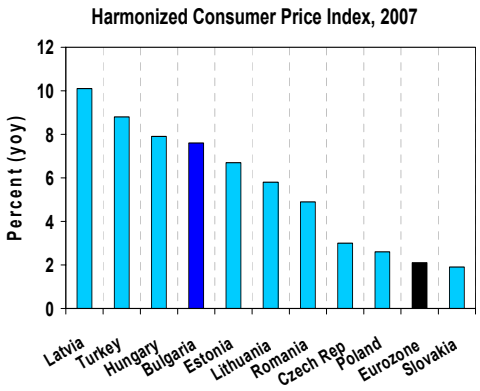


Figure 9

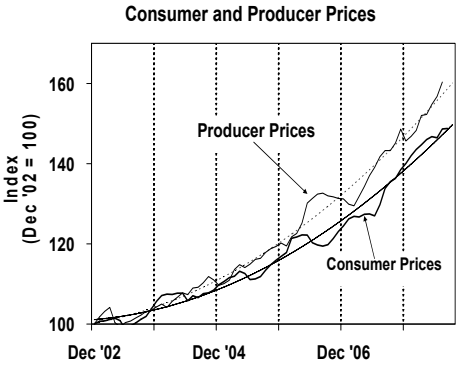


Figure 10

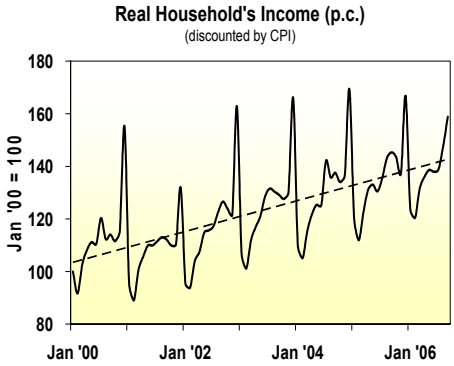
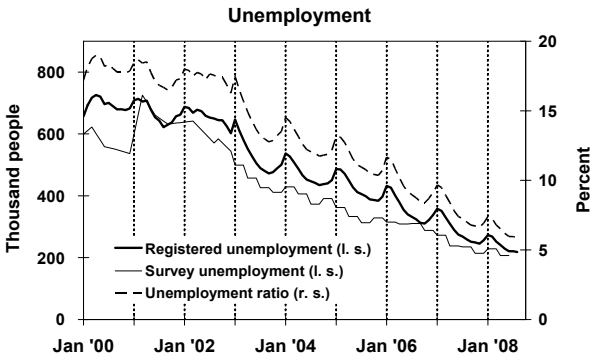


Figure 11



An expression of the tension building up in the production structures has been the widening gap between producer and consumer prices (Figure 9). The producer prices have grown much faster than consumer prices. All things being equal the latter means that there are difficulties in coordinating the profit and loss positions of producers. Experience has shown that they manage to find a way of overcoming such a disharmony. The only way is through increased efficiency. For the period after the introduction of the CBA producers have successfully adapted to the change in financial proportions, but the success in the future depends especially on the speed of price divergence. A relatively bearable speed of the price gap presumes shock avoidance and gradual and painless (without a crisis) adaptation to the changing production environment.

Under a CBA in operation the macroeconomic management (outside the BNB) does not have enough efficient mechanisms to control and regulate inflationary developments. It comes to the creation and maintenance of a really competitive economic environment which will not let monopolies to form. Building up well-functioning institutions paralleled by restricting corruption practices can also be of decisive importance for the normal development of inflationary processes. A contribution to the formation of additional (but inevitable) inflationary tension is containing the area of imposing administrative prices, which is much more a technocratic rather than economic problem as far as it comes to pure redistribution.

As a rule high inflation correlates with falling real income of the people (the essence of the so called inflationary tax). Through direct and indirect channels the strong depreciation of the local currency undermines the foundations of economic welfare.

The National Statistical Institute (NSI) evaluates the real income per capita in accordance with regular monthly household surveys. Their accuracy and adequacy should not be overvalued but there is no more reliable data on macroeconomic level.

Figure 10 illustrates the monthly changes in the real income of households per capita based on the surveys carried out by the NSI. The periodic peaks are at the end of the year, when the government budget settles all unaffected payments over the year (13^{th} salary and all other kinds of payments). This style of work, which is quite convenient for the employer, is not so for the employee and worker, but it is spread over private producers too. On the contrary, there is a highly restrictive income policy at the beginning of the year till the revenue in the budget comes back to normal and this leads to a sharp plunge in real income. This model of monthly income distribution is definitely unfavourable and exerts a negative impact on the assessment of the quality of life of the country's population, but its improvement, under our conditions, still lies ahead. Macroeconomic management has not shown yet that it understands the importance of this issue, which goes much beyond simply alleviating the life of the bureaucrats in the Ministry of finance.

The NSI has registered a positive trend of real income growth of households per capita independently of inflationary processes. The rates of growth of real income accelerate in time. For 2007 for instance the NSI worked out the growth of real income at 7.7% (a higher rate than the GDP growth rate!), despite the fact that

record high inflation rates were recorded.[19] Prices grew but neither real income nor consumption went down. Income is earned, the demand for goods and services rises but not their supply and so prices climb up.

The explanation of this phenomenon is in the ever more deepening disequilibrium between production and consumer structures. Producers prefer directing financial resources where they think there is (or will be) high profitability, whereas consumers look for the consumption of current goods and services viewed as without future by producers and investors. Over the last years this investment and production model has been connected with the freezing of financial resources in unproductive capacities (dysfunctional construction). Funds are invested, these bring income to people but the opposite supply in accordance with the solvent demand is missing. The interest of foreign investors in Bulgaria has also contributed to this development.

The model of development reflects on employment and unemployment (Figure 11). The clear downward trend of the curve during the summer months implied increased flexibility of the labour market which is positive. Employment rose and this correlated positively with the growth in real income of households per capita. There were changes in the employment structure, however, which are in line with the explanation of the phenomenon described above – simultaneous acceleration of inflation and of real income of households per capita. For 2003-2006 for instance the fastest growth of employment was in construction – by 39%, while the total growth of employment in the economy stood at 8%! One should also take account of the unregulated economic activities ("*the shadow economy*"), which different experts estimated at about a third of GDP and was mainly in construction.[20] An idea about this type of unregulated economic activity is shown on the curve of Figure 11, corresponding to the unemployment recorded by NSI surveys – this estimate systematically shows lower unemployment. Construction generates income which does not have a goods cover.

Tracing the development of employment and comparing it with this in the GDP raises the next question of scientific and practical nature. The economic rationale suggests and economic theory confirms that decreased unemployment should correlate with gravitating to the potential GDP and acceleration of the rates of economic growth (for example the well-known model of Okun and even its name "*The Okun's Law*")[21]. For five years in a row (December 2002 – December 2007) unemployment fell in absolute terms from 603 thousand people to 256 thousand people (16.3% and 6.9% in relative terms), but in spite of that the GDP growth rates remained relatively steady. This anomaly is again explained by the inefficient distribution of resources, engaged in unproductive activities especially.

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[19] The specific quantity estimate depends on the way of calculating it. If the accumulated monthly changes are also taken into account (and not the average annual observations) the growth rate of real income of households per capita for 2007 will reach about ten percent.

[20] Estimates of the "*shadow economy*" both for the transition countries and the OECD countries are quoted by *Rangelova, R.* The shadow economy is not only our patent. – Ikonomika, 2003, N 3, (in bulgarian).

[21] See *Minassian, G.* Op. cit., 7.2.

The changes in the inflationary process, income and employment imply some phenomena which have yet to be assimilated by the economy. It is logical that inflation in Bulgaria in the future will exceed inflation in the euro area. This way the Bulgarian economy will get ready to adopt the euro as the only means of payment. The speed of price increase, however, has to correspond to the ability of the economy to assimilate it painlessly as well as the changes taking place at the same time (given a fixed exchange rate). If the resources redistribution goes on inefficiently against market equilibrium, then internal tension between the individual financial and economic structures will grow until it has switched to a new parametric configuration.

3. Financial intermediation

The process of privatization of commercial banks in Bulgaria was competed in 2003. The banking management was replaced and the quality of commercial banking improved. The better economic environment in Bulgaria on the background of the relatively restrained economic growth in the West European countries provided good opportunities for an expanding and lucrative banking. The credits granted to the real sector started swelling at a high speed.[22]

One can see on Figure 12 the changes in the annual rate of growth of borrowing from the commercial banks by non-financial institutions, households and non-profit institutions serving households (NPISH). At the end of the 90s of the XXth century the rates of growth stood at about 20 percent, worked out from nominal values, which (given the state of the economy of Bulgaria at the moment) might be called restrained and cautious. Since 2002-2003 there has started a process of accelerated borrowing in the Bulgarian economy with the rates of lending remaining steady at about and over 50 percent. Under annual GDP growth rates of 5-6 percent, the lending kept at a much higher level was worrying with respect to financial stability and the BNB introduced some cooling measures. The basis of the reserve requirements was expanded and stricter norms and requirements were imposed to those commercial banks which preferred to keep to their aggressive lending policy. The banking system reacted adequately to the regulatory measures and the rates of growth of lending gradually fell to a level of about 25 percent. The BNB removed restrictions somewhat hurriedly and lending started shooting again. In search of a solution in the fall of 2007 (1st September) the BNB raised the reserve requirements from 8% to 12%, but this time the banking system did not react as it had been expected.

The reason for the aggressive lending behavior of commercial banks is easy to explain if the profit they made is traced (Figure 13). The gross profit of commercial banks in Bulgaria for 2002-2007 grew by an annual average of more than a third, while the taxes paid into the government budget grew on an annual average by a little less than 9%. The commercial banks were ready to freeze greater reserves with the BNB but make the most of the situation for firmly establishing themselves on the market of borrowing and at the same time

[22] The information of this part is mainly from the BNB's Information bulletin as well as other information sources of the BNB. The other information sources used were expressly indicated.

accumulate net profit. In this respect the policies of consecutive reduction in the corporate tax, which led it to a record low level of 10 percent assisted the unreasonable borrowing invasion as a side-effect. In 2000 for example, the commercial banks made a gross profit of BGN 418 million and paid a corporate tax of BGN135 million (a third of the gross profit), whereas in 2007 the figures were respectively BGN 1268million and BGN 124 million (a tenth of the gross profit).

Another indicator for the propitious borrowing situation in Bulgaria can be the behavior of the foreign owners (legal entities) of the commercial banks. After the dramatic 1996-1997 and the unclear political and economic situation and prospects the commercial banks preferred to keep a substantial part of their financial resources in safe (but low-yield) deposits in foreign commercial banks (Figure 14). The situation has changed after the privatization of the banking sector. The deposits kept abroad were gradually returned into the country and in addition, an accelerating process of transferring foreign financial resources began (mainly deposits of foreign owners of the Bulgarian commercial banks) to Bulgaria. The restrictive measures applied by the BNB of 2005-2006 depressed this process (again part of the assets were redirected abroad), but in 2007 the credit expansion was resumed.

The aggressive credit policy of commercial banks has altered unfavorably the composition of the banking portfolio. Experience has established a heuristic rule according to which the acceptable degree of credit risk assumes that the credits to the non-financial sector could involve up to about 55% of the banking system's assets. The data on Figure 15 show that until 2004 this share was growing constantly and exceeded the conventional limit of 55 percent, stayed there and leveled off around it over the following two years to start upwards again to much higher levels in 2007. So, the probability of unwelcome and unpredicted financial developments in the banking system to happen in this area seems much more likely.

The degree of banking intermediation in Bulgaria, measured as a ratio between the assets of commercial banks and the GDP is far from the level in the developed countries. Bulgaria hit bottom by this indicator in 1998 (a third of GDP – Figure 16) and then there began a process of consistent accumulation of assets, in order to overcome the 100% ceiling ten years later. This level lags behind the situation in the developed countries,[23] and Bulgaria should catch up with it, but it comes (again as with inflation rates) to the speed of gravitating to it. If it is too high, there are real possibilities for the emergence of some kind of financial crisis with all the ensuing unfavorable consequences.

[23] The assets share of commercial banks in GDP (the year 2000) for Poland was 65%, Hungary – 65%, Slovenia – 79%, Slovakia – 96%, Czech Republic – 181% (*Wagner, N., D. Iakova.* Financial Sector Evolution in the Central European Economies: Challenges in Supporting Macroeconomic Stability and Sustainable Growth. IMF WP/01/141, September 2001, p. 7). In Japan it accounted for about 150%, in the EU – over 250%, whereas in the USA it was much smaller - 53% in 1993 (*Allen, F., D. Gale.* Comparing Financial Systems. The MIT Press, 2000, p. 47; Structural Analysis of the EU Banking Sector, Year 2002. ECB, November 2003, Table 5). The financial system in the USA is more capital markets-oriented while in Europe and Japan it is commercial banks-oriented.

Figure 12

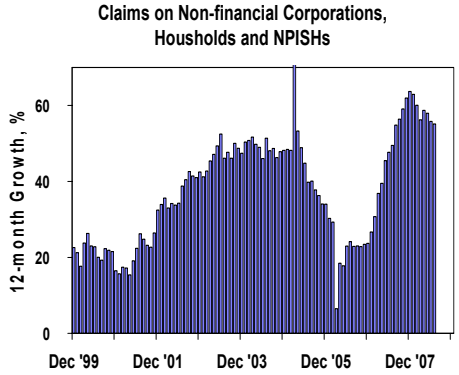


Figure 13

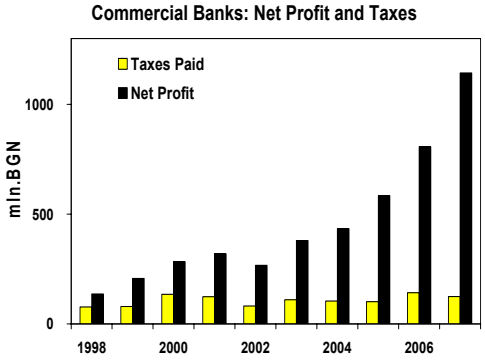


Figure 14

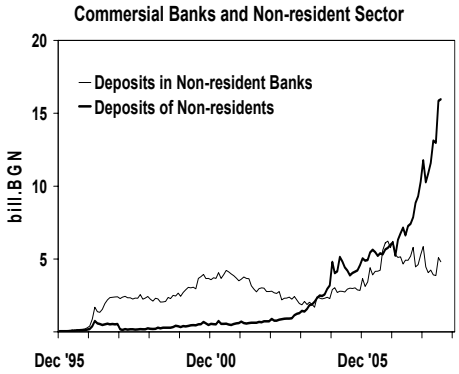


Figure 15

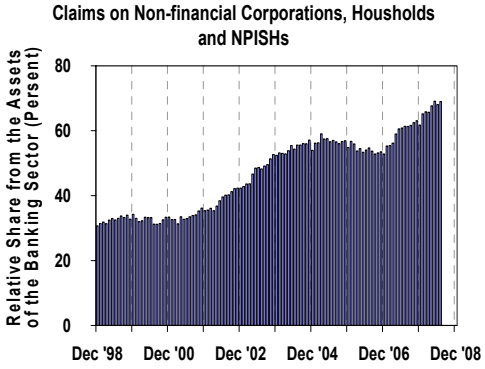
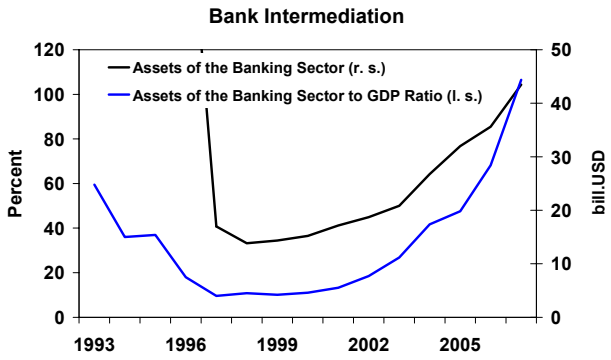


Figure 16



This type of processes and their probable consequences are analyzed in great detail in the literature and clear and telling conclusions for macroeconomic policies are made. Despite this they are often and again repeated, by making the same analogical mistakes. The well-known model of the American financier H. Minsky incorporated the specificity of the business cycle: profit accumulation in good economic times, emergence and development of speculative investment bubbles and the further round of the financial economic spiral after the obligatory sobering down takes place. The outright or unconscious opponents to the logic of H. Minski usually emphasize that each financial and economic situation is unique and unrepeated, or the substantial change in the initial conditions of "*before*" and "*now*" or the wrong monetary policy of the central bank whose rash activities initiate a financial crisis as far as the market interrelations have innate automatic regulators. Analyzing the arguments "*for*" and "*against*", C. Kindleberger concluded that the model of H. Minski studied the past and was not meant to forecast the future, but also that "*...the world seems not to have learned from experience in the past*". And that it can and must do it in the future.[24]

Figure 17

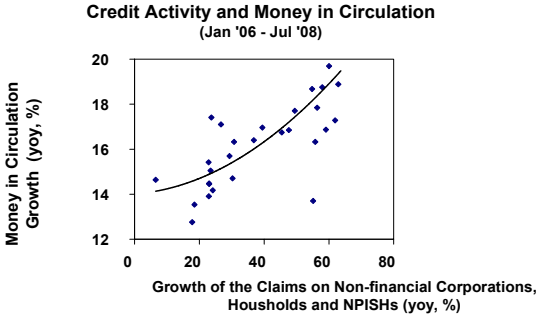


Figure 18

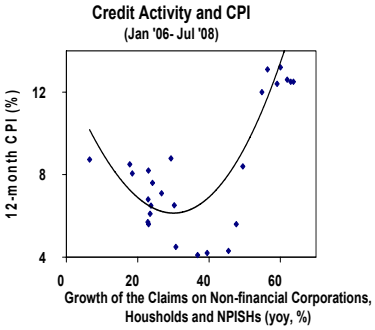
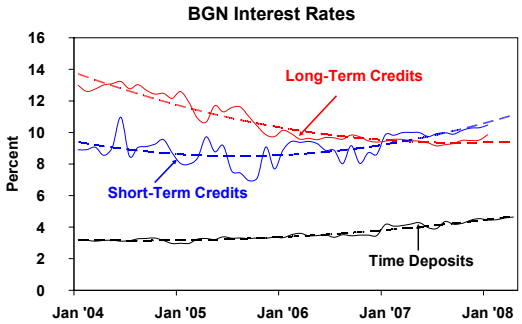


Figure 19



[24] *Kindleberger, C.* Manias, Panics and Crashes (A History of Financial Crises). Third Edition, John Wiley & Sons, Inc., 1996, p. 19.

The aggressive lending policies fan inflation too (the so called credit inflation). The impact is on the money circulation side and through it a pressure on prices is exercised. One might trace on Figure 17 the almost perfect relationship (correlation coefficient 0.85) between the annual rate (12-month) growth of lending to the non-financial sector, households and NPISHs, and the annual rate of growth of the money in circulation on the other hand from January 2006 till July 2008. This is not only linear dependence, it intensifies with the higher rates of growth of lending granted.

In accordance with the quantitative theory of money, inflation is not pumped by all the marginal money supply – part of the growth of the money in circulation services the larger GDP. Figure 18 demonstrates the form of the connection between the annual growth rate of credits granted to the non-financial sector, households and NPISHs, and the 12-month inflation (CPI) for the same period. Here the dependence is less clear although it is outlined again. A kind of turning point is the 35-percent ceiling of credit activities. Until then the relationship between the two indicators is negative. Once this ceiling is exceeded, the curve shoots steeply upwards, i.e. the two high lending of commercial banks does not merely pushes inflation up but boosts it with accelerating rates.

The special features of lending in Bulgaria thus outlined exert an impact on interest rates.Under a CBA in operation the BNB is unable to pursue its own interest rate policy, so the interest levels are fully determined on a market basis, as a result of demand and supply on the money market. The fierce banking competition has gradually led to lowering the high interest rates of the early 21st century, although that the spread between the interest on loans and deposits is still being kept at a quite high level (Figure 19). In 2007 the trend began slightly to change direction. Lending continues to be high, but the financial resource is getting little by little more expensive. Commercial banks have calculated the increasing credit risk in their activities, i.e. the market started feeling certain credit uneasiness. What happened on the international financial markets (most of all on the sub-prime mortgage market in the USA cannot go without any consequences in Bulgaria and the rules for healthy banking command some prudence.

The condition of the credit market and the regulation of banking activities is within the competence of the BNB and is its responsibility. Financial stability, however, is an attribute which is connected with the overall economic development of the country. Commercial banks follow their own assessments and criteria. In their case market expansion might offset one or another failure in banking The aftereffect of unreasonable banking competition, however, might prove painful and stressful for the whole economy. This type of outcome should not be allowed by the central bank.

Conclusion

The outlined characteristics of Bulgarian economy have revealed that there are grounds to speak about overheating. Such a situation is not

necessarily ending up in a wide-ranging recession, but the indications should not be neglected. The good manager takes care of the coming gloomy winter days when it is the hottest and a freezing cold looks highly improbable – in summer. It is certain that there are investments in Bulgarian economy, they lead to an increase in aggregate demand but the growth rates of GDP lag behind and remain modest. There is some inefficiency in the distribution of resources which breaks market equilibrium and creates tension in the production and consumer structures. This tension is likely to emerge in a clearer form in the near future and bring about most of all slower rates of economic growth.

If and for how long market automatism is able to maintain the financial and economic equilibrium steady is an issue of theoretical and practical importance.[25] Investors follow their own forecasts and expectations, but the latter do not always prove right, nor experience always confirm their rationality. Individuals often overreact faced with new information and the latter has its own price and accessibility. Expectations are influenced by non-economic factors too (for example traditions or keeping to the herd instinct behavior). In times of significant change in the model of development and the value system of society especially, uncritically copying behavior (the investment one) is quite frequent. Much too often the expectations as a basis for some investment activities are shaped by purely psychological reasons.[26] This moment stands out very clearly when economic dynamics is broken structurally. A more widely spread practice is the case of restricted rationality where economic agents are only partially rational as far as the necessary information is accessible and as far as they are able to grasp it, evaluate it and reflect on what is happening.[27]

The current external stability of the Bulgarian economy is the outcome of the so called *rational expectations equilibrium,*[28] where the expectations created for the future development induce actions of economic agents which justify and confirm the initial expectations. This lies in the basis and creation of the typical financial bubbles.

A typical example of such a type of fictitious stability over the last five-six years in a global perspective was the USD behavior on the international currency

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[25] *J. Keynes* (General theory of employment, interest and money. Sofia: Publishing house "Hristo Botev", 1993, in bulgarian) speaks about the "*self-regulating nature of the economic system*" (293 p.), but he underlines that losing faith in an overoptimistic market swoops "*with a sudden and even disastrous strength* (p. 360).

[26] J. Keynes uses the expression "*uncontrollable and unsubmissive psychology of the business world*" (ibid., p. 361).

[27] *Imam, P.* Effects of IMF Structural Adjustment Programs on Expectations: The Case of Transition Economies. IMF WP/07/261, Nov. 2007, p. 8.

[28] Rational expectation equilibrium (*Hahn, F.* Money and Inflation. The MIT Press, 1985, p. 4).

The long-term combination of stability and economic growth is the most welcome and favourable development but an exception in world economic experience rather than a rule. "*The Economist*" even called it "*... a magical combination of stability and growth*" (Sep 22nd 2007, p. 33).

markets. The international observers and financial analysts pointed out to a number of grounds for the imminent collapse of the USD against the other global currencies, especially and most of all taking into account the swelling unproductive expenditure of the USA government in the war with Iraq, Afghanistan and world terrorism. The deficits in the government budget and the current account of the balance of payments (a double deficit) grew steadily and firmly and spelled the inevitable weakening of the American currency. Economic agents all over the world could not, however, accept that the USD could collapse and their actions, led by their expectations for a probably stoic (magical!?) resistance of the USD, maintained the global currency ratios. However, economic rationale won over, although a few years later.

Slightly different, but nevertheless analogical, were the grounds for the eruption of the sub-prime mortgage crises in the USA and the developed countries. The record low interest rates, deliberately maintained by the central banks of the developed world (FED, ECB) after the terrorist attacks in the fall of 2001, brought the yield on various financial assets substantially down. In the search for higher returns capital was channeled to construction, the financial bubble began to swell until it has finally burst.

The Bulgarian experience of the early XXIth century recorded a new social and economic phenomenon. Our most recent history since the Liberation has given us arguments in favour of the statement that the Bulgarian is a thrifty person, always thinking and caring about the welfare of their own off springs. The experience of the last ten years has shown, however, that there has been a shift in this type of virtues. Most likely thanks to the intensive globalization the Bulgarian citizen is increasingly thinking about today, rethinking the maxim about ascetism today for the sake of the blurry pleasure of tomorrow and choosing the pleasure today. The choice of saving behavior is subject to a kind of *"psychological law"* (as R. Solow said[29]), and psychology is the outcome of the characteristics of the environment.

Tradition, however, is not abandoned without trace and the care for one's off springs is expressed in borrowing from the bank. This explains the combination of modest savings and high investment activity on the other hand. The long-term investment in the traditional real estate, which has to be paid off somewhere in the future, enables people to combine the concern about tomorrow with the possibility (and the probability) its material cover to be taken over by the future beneficiaries. This peculiarity should not be neglected in the analysis of various options of macroeconomic management.

Rethinking theoretically this type of behaviour at a micro level and its impact on the processes taking place on the macro level finds expression in the

[29] *Solow, R.* Monopolistic Competition and Macroeconomic Theory. Frederico Caffe Lectures, Cambridge University Press, 1998, p. 9.

transition from a consumer of unfinite to a consumer with finite lives.[30] In the first case, which was typical of the Bulgarian consumer from not long ago, the thought about the unlimited future prevailed and thriftiness was a dominant virtue. In modern times, however, the Bulgarian consumer is ever more looking for consumption today, led by the dictum "*life is short*", i.e. incorporating their own life cycle in their consumer behaviour. This has accounted for the relative stability and rectilinear dynamics of consumption irrespective of fluctuations in the situation and the economic environment.

The adequate assessment of the future is an eternal problem, difficult to be solved (unworkable) for the economy and the economists, the way the relationships in principle and the projection of the economic present into the future are.[31] The unjustified (but convenient) feeling that Bulgarian economy is far away from global economic cataclysms has often played some bad tricks to macroeconomic management[32]. It is naive to think that the collapse of the sub-prime mortgage market in the USA and other developed countries in 2007-2008 is far away from Bulgarian reality. Notwithstanding the drive for economic specialisation the structural characteristics of individual countries increasingly gravitate to each other, which accounts somewhat for the faster spread of the negative crisis effects in the modern world.[33]

What is critical is the moment of sobering when the dominant positive expectations are replaced by doubts and negative feelings. In the end financial crises can be either a predictable outcome of inadequate macroeconomic policies or unpredictable outcome of a sudden change in the market expectations[34]. Macroeconomic policies in Bulgaria let some inefficient distribution of material and financial resources to take place, aimed at freezing them in unproductive projects and it is possible for the system of public thinking and expectations to change in the near future.

After cashing in the initial impulse, the pendulum might resume its equilibrium position only after it has overtaken it and used its kinetic energy. These unstable situations of the economy are quite interesting for science and practice as

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[30] *Bayoumi, T.* GEM: A New International Macroeconomic Model. IMF, OP 239, 2004, p. 20.

[31] "*No process of expectation formation can achive equivalent coordination*" (*Tobin, J.* Asset Accumulation and Economic Activity. The University of Chicago Press, 1980, p. 23-26).

[32] Let us remember the complacent behaviour of Bulgarian rulers in the mid-70s of the XXth century when the global energy crisis broke out. What was indoctrinated, officially and obstinately, was that Bulgaria was safely protected from such collisions thanks to the overall socialist shield of stability. These assurances were quickly forgotten a decade later when the country woke up with a regime for the electricity consumption. A similar kind of calm is definitely inexcusable at the end of the first decade of the XXIth century, with Bulgaria being in a radically different economic environment.

[33] *Mauro, P., Y. Yafeh.* Financial Crises of the Future. - Finance and Development, Dec 2007, p. 27.

[34] *Marion, N.* Some Parallels Between Currency and Banking Crises. - In: International Finance and Financial Crises. Kluwer Academic Publishers – IMF, 2000, p. 6.

far as they refer to a situation where a relatively slight management intervention might bring about substantial changes in the environment and the way processes run.[35]

The objective of macroeconomic management is to fix the market failures without obstructing and preventing the play of market mechanisms. As a rule the deficiencies of market processes are not contested by specialists, as well as that "*... the monetary and financial policy are working instruments for smoothing the market processes*"[36]. The boundary, so difficult to catch, lies exactly here - between the necessary management interference and the inadmissible economic management involvement on the other hand. This makes macroeconomic management a combination of science and art and may be more often – much more art than science.[37] Experience has shown that macroeconomic management (almost traditionally in Bulgaria) tends clearly to generalising the market failures that show up and easily slips into expanding the scope of management impact. Sticking to the admissible extent of management intervention is a key issue in a market economy. Governments in Bulgaria begin their term of office with a clearly and openly declared neoclassical stand and gradually and quietly switch to and finish their mandate as practicising, warring and vulgar Keynesians.

The combination of internal and external demand makes up the prerequisites for economic growth. In the modern globalising world combining exogenous and endogenous factors predetermines the nature and dynamics of social and economic progress. The optimal proportion of both types of factors is not universal and fixed for ever. It is related to specific circumstances and changes in accordance with the duration and amplitude of the business cycle. In the short run fluctuations of varied strength and scope are possible, but in the long run things look more different and better defined.

Bulgaria of the early XXIth century is dominated by the external (exogenous) factors of economic growth, but this cannot go for too long. The country's membership into the EU has a favourable effect on smoothing the cyclical fluctuations and gives fuel to the economic engine. The economic "*learning how to walk*" will have to be replaced by its own steps where the internal (endogenous) factors of economic growth will be determinant.

In the specific situation of Bulgaria of 2008 the macroeconomic policies aimed at preventing possible unfavourable developments from happening as a result of overheating the economy should be based on the following four poles:

1. Building up and maintaining an efficient institutional environment of good quality which will not let unregulated (criminal) diverting of funds. The

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[35] *Solow , R*. Growth Theory (an Exposition)..., p. xiii.

[36] *Solow, R.* If I could choose between ECB and FED ... (interview for Handesblatt). - Ikonomika, 2008, N 1, p. 85, in Bulgarian.

[37] The brilliant analysis of *Kindleberger, C.* (Op. cit.) seems to be unsurpassed in the literature.

unsanctioned embezzlement of material and financial resources, followed by their accumulation and freezing, which is by its nature corrupt ional, acts as a stumbling-block to economic growth and a deterrent to the social and economic advance, engenders and deepens any market disequilibrium.

2. Pursuing a policy of restricting unproductive accumulation. Under the Bulgarian conditions investment in real estate is traditionally considered as the safest and most lucrative. This is why massive financial resources have been tied up in unproductive buildings. A conscientiously made legislation, based on tax regulators and strict abidance by the Law, might redirect the investors' interest to investing in production.

3. Improved control over real estate sales, preventing speculations in the way of fictitious sales, restricting unregulated and unrecorded activities, most of all in construction.

4. Macroeconomic management is supposed to spare no efforts to control and restrict the money circulation. In this respect a well-thought coordination of the activities of the Ministry of Finance and the BNB is highly recommended. By means of its fiscal policy the Ministry of finance is able to withdraw financial resources from the money market and redirect them to the BNB (to maintain the so called *fiscal reserves*), whereas the BNB is to bear the responsibility to cool down the aggressive lending policies of the commercial banks in their search for quick and hefty profits. The unbalanced credit expansion correlates with high investments but experience shows that these investments are channeled to unproductive accumulation.

The elements of macroeconomic policies described above can and should lead to an increase in the market interest rates in the country. Such a development will be felt painfully by some strata of the population and the economic agents – especially and most of all by those who have borrowed considerable financial resources to invest in real estate, looking for quick and easy profit. The investment risk in a market economy is assessed, accepted and borne by each individual investor and the healing measures almost always cause pain.

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