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*Institute of Economic Forecasting*

# **2 THE IMPACT OF THE NATIONAL BANK OF ROMANIA'S MONETARY POLICY ON THE BANKING CREDITS, THE DOMESTIC SAVINGS AND INVESTMENTS (AS COMPARED TO THE OTHER CENTRAL AND EASTERN EUROPEAN COUNTRIES) THEIR INFLUENCE ON THE CURRENT ACCOUNT IMBALANCE**

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## **Abstract**

After the centrally-planned economy ceased to exist, the process of post-socialist transformations has advanced significantly. The countries of the Central and Eastern Europe (CEE), Southern and Eastern Europe (SEE) and the Commonwealth of Independent States (CIS) have been involved since in vast systematic changes. Undoubtedly, these changes have been leading to fully-fledged market economies, although the precise outcome of transformation was not going to be the same for all the countries involved.

The main objective of the restructuring of the banking systems was to create some modern such systems, according to the international standards, which could directly support the development and the stability of the economies. This objective could be achieved by tight efforts of both the central banks and commercial banks. In the current economic environment, where the most important goal is globalization and openness to the international trends, where the competition becomes sounder every day and the rise in the quality is necessary, the firms face an important need for capital and for short-term and long-term funds, and the role of the banks in supporting this development and in ensuring and sustaining the macroeconomic balance becomes crucial.

The paper investigates the role of the monetary policy in the area of the banking credits of the commercial banks, in the savings area and in the investments area and their implications on the macroeconomic balance (current account balance, budget balance and private

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balance). The analysis is based more on the Romanian case as compared to the other countries in the Central and Eastern European region.

**Keywords:** monetary policy, minimum reserves, discount rate, banking system, banking credit, domestic savings, investments, current account balance.

**JEL Classification:** E21, E22, E44, E52, E63.

## 1. Introduction

After the centrally-planned economy ceased to exist, the process of post-socialist transformations has advanced significantly. 27 countries in the Central and Eastern Europe (CEE), Southern and Eastern Europe (SEE) and the Commonwealth of Independent States (CIS) have been involved since in vast systematic changes. Undoubtedly, these changes have been leading to fully-fledged market economies, although the precise outcome of transformation was not going to be the same for all the countries involved. In fact, some leaders of the CEE region joined the EU in 2004 while others, especially countries of the CIS region, were lagging behind in systematic changes and maintaining a hybrid system with remnants of the central planning existing alongside elements of market regulation and a growing private sector.

The financial sector is the backbone of every market economy. An important and in some countries even a dominant role is played by the banks. A stable and efficient banking sector is therefore an essential precondition for both to increase the economic level and to secure a smooth path of the integration process crowned by the adoption of the euro. Over the several past years, banking has changed significantly, due to irreversible processes such as liberalization, globalization, privatization, mergers and acquisition or the implementation of modern information technologies. However, the transformation of the savings of the banks' customers into loans and credits financing consumption and investment can be still considered as a core of the banking business and the foundation of the banks' existence.

The role of the banks is essential for the development of the economy. The development of the firms is a strategic factor of the economic growth, due to the large number of jobs and value-added they create in all the regions.

Thus, the banking systems started to participate and support such a dynamics, because the settlement, firstly, and the development of the new enterprises afterwards always should be financially supported. In the current economic environment, when the main target is the globalization and a larger openness to the international tendencies, where the competition becomes tougher and sounder and the rise in the quality becomes a necessity, the enterprises face a sharper need of capital and both short-term and long-term liquidities.

We could also say that the credit institutions own a part of the financial levers of the economy, and by their policy they could support or break the development of the economic agents. The credit represents the main financing and investment source of the firms, especially in a country such as Romania, which is undergoing a period of transition to a stable and efficient market economy.

The main objective of restructuring of the banking systems is to create a modern such system, according to the international standards, which could directly support the

development and the stability of the entire economy. This objective could be achieved by determined efforts of both the NBR and the commercial banks.

The main objective of the entire transition period should have been the inflows of the foreign capital in the financial and banking area and the settlement and the development of the banking system according to the standards of the market economy, which could achieve an efficient and profitable banking activity, based on the volume of the liabilities and, especially on the possibilities of attracting the funds from the economy and from the people. Both the theory and the banking practice proved that the banks performances directly depended on the nature of the economic and social systems, the level of the country development and the economic policy that the states have implemented. The market economy imposes the restructuring of the banking system according to the western banking standards and thus, the banking system can support the settlement of a new type of economy and the re-launch of the economic growth.

However, the changes in these economies have influenced the macroeconomic balances, significantly raising doubts about their sustainability and concerns over the potential impacts that a rapid and disordered correction of these imbalances might have had. On the one hand, these imbalances reflect the success of the structural changes that have enabled capital and investment inflows and have opened up prospects of fast economic growth. On the other hand, from another perspective, the imbalances frequently reflect the mismanaged transition processes featuring unsustainable imbalances that are potentially a source of value or currency and/or balance of payments crises (the Czech Republic (1997), the Russian Federation (1998)). In fact, the general view is that postponing the imbalances adjustments (especially the external ones that were the largest and lasting ones) it increases the costs of adjustment in the economy. However, given that the financial markets in the transition countries are gradually operating efficiently, the deterioration of the external balances might offer investment opportunities in the region as compared to the rest of the world. Indeed, a growing external deficit might be a sign of the gradual growth in the economic strength of the transition economies, and is thus not necessarily a bad thing.

## **2. The monetary and banking factors play the most important role in the economic strategies in the contemporary market economy**

In the last three decades, some major changes in the world economy occurred, and their consequences were only partly assimilated by the economic theory, which mainly remained faithful to some economic ideas that did not fit any more to the current situation.

The banks can influence the economic processes using different mechanisms and mainly the one of the credit and the interest rate: the real economy can be re-oriented using the exchange rate and the interest rate, and these are even more efficient and lasting than the state plans in the centralized economies.

The main instrument used by the commercial banks to influence the economic development is the banking credit. The volume of the credits in the economy is influenced by the active interest rate that depends on the economic state, the inflation rate, the risk, the credit demand and supply and, firstly, on the monetary policy implemented by the National Bank of

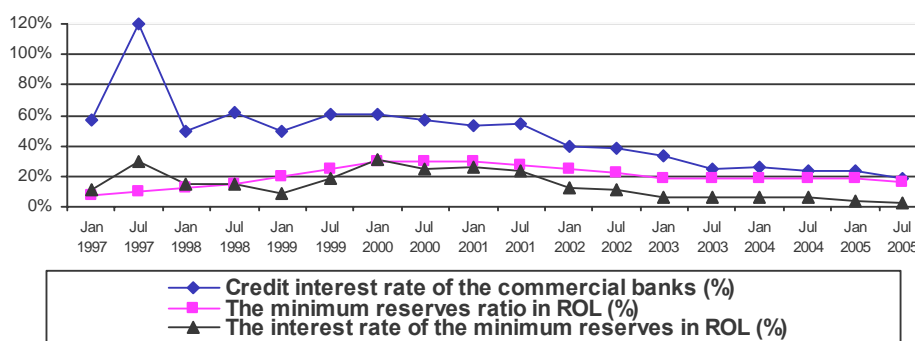
Romania (NBR), which uses the minimum reserves ratio and the discount rate to influence the banking credits.

**a) The minimum reserves ratio** was the main factor that maintained such high interest rates for credits.

The NBR's interventions in the monetary market have a greater influence over the interest rates, even larger than the discount rate.

**Figure 1**

**The credit interest rates, the minimum reserves ratio and the interest rates for the minimum reserves in ROL**



Source: Author's computations using the statistical data from the NBR's Annual Reports and Monthly Bulletins.

Using this monetary instrument in order to maintain certain high interest rates for the deposits leads to the following effects:

- The credit supply of the commercial banks diminishes, so that some resources are withdrawn from the economic circuit (and kept in reserves) and are not used in the economy;
- It causes a rise in the interest rate in the economy. Its effects are:
  - The banks offer a interest rate for the deposits, which can be covered by the interest rate obtained for the credits. Unfortunately, not all the resources are used for granting the credits, so that the credits should ensure the same interest for the banks as if all the resources are used for credits.
  - When the central bank rises the minimum reserves ratio (as it happened in Romania in 1997-2001), the commercial banks have to intervene on the monetary market by rising the money demand in order to obtain the liquidity needed for covering the new larger volume of the reserves. As long as the money demand rises and the supply remains lower than the demand, there will be a strong pressure for rising the interest rates on that market. This larger interest rate should be covered by rising the credit interest rate.

In our country, the rate for such deposits was rather high and sometimes very high. For instance, in the second half of 1999 it exceeded 20% and in 2000 and the first half of 2001 it has even reached a level of 30%.

Thus, in some periods the third part of the banking resources were kept in the accounts at the central bank as the minimum reserves and they could not be used for crediting and financing the national economy that faced a sharp need of funds. That led to an unjustified rise in the active interest rates of the commercial banks.

This way, the access to the credits was limited for the economic agents and for those who still afforded to borrow from banks this has led to the rise in that financing cost and diminished their profits and, why not, cut the budgetary incomes and made the budget deficit even larger because the profit taxes kept dropping as a result of diminishing the taxing profits.

Because of the great monetary liquidity excess in the economy as a result of some inadequate NBR monetary policies, starting from April 1999 the amount of the minimum reserves was determined daily, then, since July 16<sup>th</sup> 1999, the minimum reserves ratio rose from 15% to 20%. These minimum reserves served a double objective: the monetary policy and one of banking prudence.

In 2000, the NBR performed a partial sterilization of the excess of domestic currency on the market and that led to some significant positive differences between the average value of the effective reserves in the current account and the established level of the minimum reserves (the peak was reached in December), as well as some high level of the gaps between the daily average of the effective banks reserves into the NBR accounts and their established level. Still, the NBR managed to maintain a low gap in order to fulfill the objective of targeting the monetary base as the program agreed by the IMF stated.

In 2001, as a result of the permanent collaboration and dialogue between the Romanian Banks Association (ARE) and the NBR, the latter has finally understood that the minimum reserves ratio had to be reduced for achieving a larger access of the small and medium sized enterprises to credits. Thus, the minimum reserves ratio was reduced in 2001 from 30% to 27% in July and, finally, to 25% in the last quarter of the year. The descendent trend also continued in 2002, when the ratio dropped to 22% in April.

The ascendant trend of the minimum reserves ratio in the last decade improved the banks' liquidity, but has also affected badly the banking performances and the support of the activity of the economic agents by credits.

The NBR used this monetary instrument especially over the interval 1999-2001, when it raised the minimum reserves ratio both for the deposits denominated in domestic currency and for the ones denominated in foreign currency, in order to ensure a tight control of the inter-banking liquidity and to ensure additional funds attracted at some low interest rates. The peak of the minimum reserves ratio of 30% was maintained longer than a year and a half and it dropped only in the second half of 2001.

For having a complete image regarding the NBR financial effort of sterilization of the inter-banking liquidity after the reduction in the minimum reserves ratio from 30% to 27% in 2001, we have to mention here that the amounts resulted from this measure were large. Thus, those amounts should have been absorbed from the market using the open-market

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operations that were realized at the market interest rate and not at the interest rate offered by the NBR for the minimum reserves, as it often happened before that moment.

Analyzing the data in Table 1, one may notice that making up the minimum reserves was not the best choice for the banking profitability. Still, if we consider the need of banking liquidity, this compulsory placement was extremely necessary, because it was the most liquid asset of the banks. Moreover, although nobody would have liked to use this "concession" because of the image impact resulted from this, not fulfilling the minimum reserves level in a period would have been transferred in the following period of applying the minimum reserves.

We can conclude that the level of the minimum reserves both in ROL and foreign currency is extremely important for the evolution of the financial and banking market, because it influences the following elements:

- the banking strategy for attracting and placing the short-term and long-term resources;
- the support of the economy by credits;
- the access to the credits granted with low interest rates;
- the profitability level of the banks, because the minimum reserves grant low interest rates for the banks.

The higher the minimum reserves ratio is the greater the liquidity is for the banks. Still, there are some malfunctions that cannot be ignored. There were some cases when the banks went bankrupt even when they presented an adequate liquidity. That means that only the minimum reserves themselves cannot ensure the well-functioning of a bank that has not a proper management. At least, the signal of not fulfilling the NBR requests can limit the negative effects that can spread around in the entire banking system, in the case that one bank may face a liquidity crisis.

Given this situation, modifying the minimum reserves ratio strongly influenced the credit interest rates of the commercial banks, as one may see from Table 1 below.

We also have to emphasize the low level of the interest rates of the minimum reserves, much lower than the market interest rate average. For example, in Romania the NBR offered for the minimum reserves an interest rate of almost 20% of the credit interest rate of the commercial banks in 1997-1999, but this interest rate rose in 2000 and 2001 to almost 40-50% (apparently because of the IMF pressures). It becomes obvious that this low level of the interest rates of the minimum reserves that was totally insufficient for covering the deposit interest rates should have been covered by the credit interest rates that rose this way.

**Table 1**

#### **The minimum reserves ratio and the interest rates for the banking minimum reserves**



| Period | The interest rates for the banking minimum reserves (% per year) |      |      | The minimum reserves ratio (%) |                    |      |
|--------|--|------|------|--------------------------------|--------------------|------|
|        | ROL  | USD  | EUR  | RON                            | Foreign currencies |      |
| 2000   | Jan.   | 31.0 | 3.40 | 2.10                           | 30.0               | 20.0 |
|        | Feb.   | 31.0 | 3.40 | 2.20                           | 30.0               | 20.0 |
|        | Mar.   | 30.5 | 3.40 | 2.20                           | 30.0               | 20.0 |
|        | Apr.   | 28.0 | 3.40 | 2.20                           | 30.0               | 20.0 |
|        | May  | 26.5 | 3.10 | 2.10                           | 30.0               | 20.0 |
|        | Jun.   | 26.5 | 3.10 | 2.10                           | 30.0               | 20.0 |
|        | Jul.   | 25.0 | 3.10 | 2.10                           | 30.0               | 20.0 |
|        | Aug.   | 25.0 | 3.10 | 2.10                           | 30.0               | 20.0 |
|        | Sep.   | 25.0 | 3.10 | 2.10                           | 30.0               | 20.0 |
|        | Oct.   | 25.0 | 3.10 | 2.10                           | 30.0               | 20.0 |
|        | Nov.   | 25.5 | 3.10 | 2.10                           | 30.0               | 20.0 |
|        | Dec.   | 25.5 | 3.10 | 2.10                           | 30.0               | 20.0 |
| 2001   | Jan.   | 25.5 | 3.10 | 2.10                           | 30.0               | 20.0 |
|        | Feb.   | 25.5 | 3.00 | 2.10                           | 30.0               | 20.0 |
|        | Mar.   | 25.0 | 2.90 | 2.00                           | 30.0               | 20.0 |
|        | Apr.   | 25.0 | 2.90 | 2.00                           | 30.0               | 20.0 |
|        | May  | 25.0 | 2.80 | 2.00                           | 30.0               | 20.0 |
|        | Jun.   | 24.0 | 2.70 | 2.00                           | 30.0               | 20.0 |
|        | Jul.   | 23.0 | 2.50 | 2.00                           | 27.0               | 20.0 |
|        | Aug.   | 23.0 | 2.50 | 2.00                           | 27.0               | 20.0 |
|        | Sep.   | 23.0 | 2.50 | 2.00                           | 27.0               | 20.0 |
|        | Oct.   | 20.0 | 2.20 | 1.70                           | 25.0               | 20.0 |
|        | Nov.   | 19.0 | 1.00 | 1.00                           | 25.0               | 20.0 |
|        | Dec.   | 17.0 | 1.00 | 1.00                           | 25.0               | 20.0 |
| 2002   | Jan.   | 12.3 | 1.00 | 1.00                           | 25.0               | 20.0 |
|        | Feb.   | 12.3 | 1.00 | 1.00                           | 25.0               | 20.0 |
|        | Mar.   | 12.3 | 1.00 | 1.00                           | 25.0               | 20.0 |
|        | Apr.   | 12.3 | 1.00 | 1.00                           | 22.0               | 22.0 |
|        | May  | 11.5 | 1.00 | 1.00                           | 22.0               | 22.0 |
|        | Jun.   | 11.5 | 1.00 | 1.00                           | 22.0               | 22.0 |
|        | Jul.   | 11.0 | 1.00 | 1.00                           | 22.0               | 22.0 |
|        | Aug.   | 10.8 | 1.00 | 1.00                           | 22.0               | 22.0 |
|        | Sep.   | 8.00 | 1.00 | 1.00                           | 22.0               | 22.0 |
|        | Oct.   | 8.00 | 1.00 | 1.00                           | 22.0               | 22.0 |
|        | Nov.   | 8.00 | 1.00 | 1.00                           | 18.0               | 25.0 |
|        | Dec.   | 7.00 | 1.00 | 1.00                           | 18.0               | 25.0 |
| 2003   | Jan.   | 6.25 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Feb.   | 6.25 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Mar.   | 6.25 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Apr.   | 6.25 | 0.75 | 1.00                           | 18.0               | 25.0 |



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| Period | The interest rates for the banking minimum reserves (% per year) |      |      | The minimum reserves ratio (%) |                    |      |
|--------|--|------|------|--------------------------------|--------------------|------|
|        | ROL  | USD  | EUR  | RON                            | Foreign currencies |      |
| 2004   | May  | 6.25 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Jun.   | 6.25 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Jul.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Aug.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Sep.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Oct.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Nov.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Dec.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Jan.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Feb.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Mar.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Apr.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | May  | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Jun.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Jul.   | 6.00 | 0.75 | 1.00                           | 18.0               | 25.0 |
|        | Aug.   | 6.00 | 0.75 | 1.00                           | 18.0               | 30.0 |
|        | Sep.   | 6.00 | 0.75 | 1.00                           | 18.0               | 30.0 |
|        | Oct.   | 6.00 | 0.75 | 1.00                           | 18.0               | 30.0 |
|        | Nov.   | 6.00 | 0.75 | 1.00                           | 18.0               | 30.0 |
|        | Dec.   | 6.00 | 0.75 | 1.00                           | 18.0               | 30.0 |
| 2005   | Jan.   | 4.00 | 0.80 | 1.00                           | 18.0               | 30.0 |
|        | Feb.   | 4.00 | 0.80 | 1.00                           | 18.0               | 30.0 |
|        | Mar.   | 4.00 | 0.80 | 1.00                           | 18.0               | 30.0 |
|        | Apr.   | 2.00 | 0.80 | 0.70                           | 18.0               | 30.0 |
|        | May  | 2.00 | 0.80 | 0.70                           | 18.0               | 30.0 |
|        | Jun.   | 2.00 | 0.80 | 0.70                           | 18.0               | 30.0 |
|        | Jul.   | 2.00 | 0.80 | 0.70                           | 18.0               | 30.0 |
|        | Aug.   | 2.00 | 0.80 | 0.70                           | 16.0               | 30.0 |
|        | Sep.   | 1.50 | 0.80 | 0.70                           | 16.0               | 30.0 |
|        | Oct.   | 1.50 | 0.80 | 0.70                           | 16.0               | 30.0 |
|        | Nov.   | 1.50 | 0.95 | 0.70                           | 16.0               | 30.0 |

Source: Author's computations using the statistical data from the NBR Annual Reports and Monthly Bulletins.

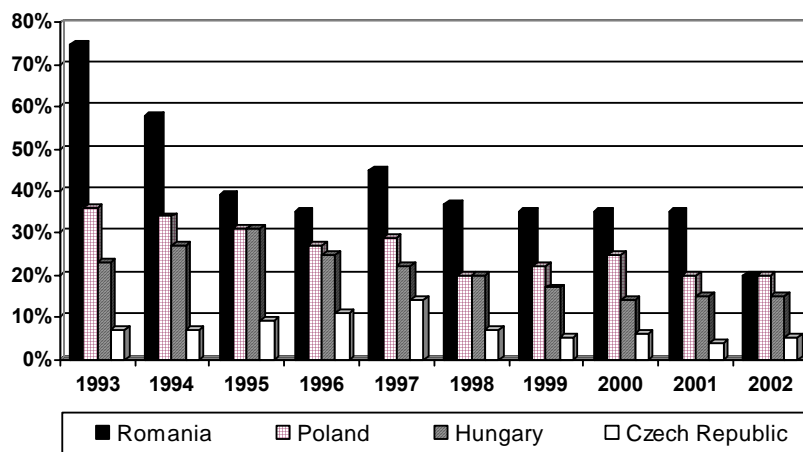
**b) The discount rate:** In our country, the discount rate was much higher than in the other former socialist countries over the entire last decade. The evolution of the discount rate of the several central banks in the Central and Eastern Europe is presented in the figure below and stresses significant differences to the detriment of our country (Figure 2).

Figure 2





**The discount rate evolution in Romania and some other countries of the Central and Eastern Europe**



Source: Author's computations using the statistical data from Cestat Statistical Bulletin, 2002.

In Romania, the discount rate was almost three times higher than the one in the Czech Republic, twice as much as the one in Hungary, four times higher than in Slovenia and five times higher than in Slovakia.

The conclusion is simple: the central banks of the analyzed countries considered a high discount rate as an abnormal situation that had to be avoided or they gave up on it after a few years. For the NBR this abnormal situation became permanent and caused the rise and preservation of high interest rates on the Romanian market for a long time.

**3. The significant drop of the credit market and of the real economy. Some international comparisons regarding the share of the banking credit in the GDP**

In the countries that face a normal evolution of their economies the credits usually rise and their structure display a significant share of the credits for the non-banking sector, especially for the economic agents for financing their investments and for the well-functioning of the enterprises. It is obvious that the situation is different for each country and for every economic agent, according to the capitalization level of the national economy and of every economic agent, but the above mentioned trend is real (Table 2).

Table 2

**The evolution of the banking credit share of GDP in Romania and other countries**



| Year | The total credit share of the GDP, % |                               |         |                |                     |        |                |        |
|------|--------------------------------------|-------------------------------|---------|----------------|---------------------|--------|----------------|--------|
|      | Romania                              | Other countries in transition |         |                | Developed countries |        |                |        |
|      |                                      | Poland                        | Hungary | Czech Republic | USA                 | France | United Kingdom | Canada |
| 1993 | 21                                   | 41                            | 97      | 72             | 76                  | 102    | 114            | 91     |
| 1994 | 18                                   | 39                            | 93      | 72             | 75                  | 101    | 116            | 91     |
| 1995 | 24                                   | 34                            | 82      | 72             | 77                  | 102    | 122            | 90     |
| 1996 | 29                                   | 36                            | 72      | 70             | 77                  | 102    | 126            | 93     |
| 1997 | 19                                   | 37                            | 65      | 73             | 78                  | 102    | 125            | 94     |
| 1998 | 22                                   | 37                            | 63      | 66             | 81                  | 101    | 122            | 92     |
| 1999 | 18                                   | 40                            | 52      | 63             | 83                  | 105    | 125            | 89     |
| 2000 | 14                                   | 36                            | 48      | 57             | 86                  | 103    | 134            | 86     |
| 2001 | 12                                   | 40                            | 50      | 57             | 89                  | 117    | 140            | 88     |
| 2002 | 13                                   | 38                            | 53      | 56             | 91                  | 118    | 145            | 90     |

Source: IMF, *International Financial Statistics*, June 2003.

According to the data presented in the above table and figure, there are some important differences between our country and the other analyzed countries, that are partly due to the evolution of the real GDP, which is also in the detriment of our country.

The drop in the credit share of the GDP to levels of 20-25% and even lower represents, no doubt, the neglecting of the credit as the main instrument in order to influence the economy and to stimulate the economic growth.

#### **4. The saving process and the investment process and their impact on the current account imbalances in the transition countries**

The large and lasting current account deficits in the Central and Eastern European Countries in the transition period caused the imbalance of the savings and investments ratio (the drop in the savings volume and the rise in the investments).

The lasting deficits generate borrowings from abroad that are more dangerous for the economy if they are oriented towards consumption and not towards investments. A high investments rate leads to a rise in the productive capacity and to a rise in the export in the future, which will make the burden of the external debt more bearable.

A deficit that is generated by the drop in the savings is less sustainable than the one caused by the rise in the investments (and that is the case of Romania). Moreover, the investments in the private productive sector, in the merchandises sector, will make the deficits more sustainable (unlike the borrowings directed to the real estate investments).

The current account deficit is sustainable if the economic growth rate is high, because it leads to the rise in the investments, while the expected profits rise, too, and to the temporary drop in the private savings, because the domestic consumption is stimulated.

The current account imbalance based on the drop in the national saving ratio can be generated either by the diminution of the private savings or by the diminution of the public ones (large public deficits). A fall in the national savings caused by a lower public saving is potentially more dangerous than a fall in the private savings, because a fall in the private savings is more likely to be a transitory phenomenon, while the structural public sector deficits are often long-lasting and may result in an unsustainable increase in the foreign debt. The temporary drop in the private savings can be due to the rise in the expectations regarding the GDP growth, which will lead to a permanent higher income and the rise in the consumption.

All the CEE countries faced a serious drop in the real GDP in the first period of transition. The higher drop was observed over the interval 1991-1992 (more than a share of 10% of GDP per year).

Romania had smaller imbalances (averaging 3-4% of GDP), but has shown persistent and structural deficits since 1990 and had experienced an economic crisis similar to that of Bulgaria, only that it had managed it better.

In most of the countries (Poland, Bulgaria, Hungary), the collapse of output in the early 1990's led to significant current account deficits as the national saving rates dropped more drastically than the investment rates. The collapse of GDP was exacerbated by the serious external shocks that hit the transition economies: a worsening of their terms of trade as they moved to the world prices and the collapse of the trade within the CEMA region. Such external shocks led to a sharp reduction in the exports and a deterioration of the current account.

GDP growth resumed in 1992 in Poland, in 1993 in Romania, in 1994 in Hungary, the Czech Republic, Croatia, Bulgaria, but the return to positive growth (in 2000 in Romania) has been generally associated with a significant worsening of the current account over the following years for most of these countries. The higher economic growth rate was the larger imbalance of the current account and the commercial balance happened (the Czech Republic, the Slovak Republic, Estonia, and Croatia). In the countries where the economic growth was slower the external imbalances were smaller or the current account situation even improved in some cases (Hungary, Bulgaria, and Romania).

In general, the worsening of the current account has been caused by a sharp recovery of the national investment rates, driven by the return to positive growth. National saving rates have generally grown, but more slowly than the national investment rates or they have remained stagnant, especially due to the resumption of growth that has led to an increase in consumption rates (Bulgaria, Romania). At some extent, the low level of the savings was due to the large budgetary deficits in almost every country in the region. The data suggest that most of the improvement after 1993 was due to an increase in the national savings rate. While the private savings as a share of GDP have remained stable, an improvement in public savings has occurred. However, in Romania the savings rates were very low, due to the negative real interest rates that stimulated consumption and due to the high inflation rates.

In some countries in the region, the widening of the public deficits seemed to happened at the same time with the widening of the current account deficits. In Romania and Bulgaria, the data regarding the savings are not complete for comparisons or it is difficult to analyze them because of the frequent changes of the inflation rate in the last decade (the low



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savings level was also due to the sudden and frequent changes of the fiscal policy). In the last decade, the low rate of savings and investments generated serious problems for the Romanian current account. Thus, the current account deficits were structural in the case of Romania.

The overview of the current account balance in transition countries shows that, with the exception of Russian Federation – a major commodity exporter, the opening up to external trade has been accompanied by significant current account deficits (see Table 3). In the CEE, the current account balances were not problematic, with even a moderate positive balance as a share of GDP until 1994 (averaging around 1 percent of GDP), reflecting contractions in the domestic demand, real exchange rate under-valuations and external financing constraints. Afterwards, significant current account deficit deterioration was noticed in the region, peaking at almost 7 percent of GDP in 1998 on average (Lithuania (11.7), Latvia (10.7) and Slovakia (9.6)), mostly as a result of growing imports of both consumption and investment goods. Moreover, the gradual growth of the current account deficit in the CEE region reflects a combination of long-term growth and structural factors, external shocks and domestic policies. More precisely, the deterioration of the current accounts in the region was the result of the growth of merchandise trade deficits, downward trends in the service balance, rising indebtedness and profit repatriation, as well as the consequence of the continuous real appreciation of the domestic currency in most of the cases examined.

**Table 3**

**Saving/investment imbalances in the transition countries  
(in percentage of GDP; un-weighted averages)**

|                        | Private sector balances |                   |                   | Government balances |                   |                   | Current account balance |                   |                   |
|------------------------|-------------------------|-------------------|-------------------|---------------------|-------------------|-------------------|-------------------------|-------------------|-------------------|
|                        | 1992-1997 average       | 1998-2003 Average | 1992-2003 average | 1992-1997 average   | 1998-2003 average | 1992-2003 average | 1992-1997 average       | 1998-2003 average | 1992-2003 average |
| 1                      | 2                       | 3                 | 4                 | 5                   | 6                 | 7                 | 8                       | 9                 | 10                |
| Czech R.               | -3.9                    | -1.4              | -2.7              | 0.5                 | -3.4              | -1.5              | -3.4                    | -4.8              | -4.2              |
| Estonia                | -4.3                    | -7.8              | -6.1              | -0.1                | -0.4              | -0.2              | -4.4                    | -8.2              | -6.3              |
| Hungary                | -1.8                    | -2.3              | -2                | -3.5                | -5.4              | -4.5              | -5.3                    | -7.7              | -6.5              |
| 1                      | 2                       | 3                 | 4                 | 5                   | 6                 | 7                 | 8                       | 9                 | 10                |
| Latvia                 | 5.5                     | -6.8              | -0.7              | -1.0                | -2.2              | -1.6              | 4.5                     | -9.0              | -2.3              |
| Lithuania              | -2.7                    | -3.9              | -3.4              | -4.1                | -3.6              | -3.8              | -6.8                    | -7.5              | -7.2              |
| Poland                 | 0.5                     | -0.8              | -0.2              | -2.9                | -3.4              | -3.1              | -2.4                    | -4.2              | -3.3              |
| Slovakia               | 0.6                     | -2                | -0.8              | -4.1                | -4.0              | -4.0              | -3.5                    | -6.0              | -4.8              |
| Slovenia               | 2.0                     | 0.6               | 1.3               | 0.2                 | -1.4              | -0.6              | 2.2                     | -0.8              | 0.7               |
| CEE                    | 0.0                     | -3.0              | -1.5              | -1.8                | -3.0              | -2.4              | -1.8                    | -6.0              | -3.9              |
| Albania                | -9.2                    | 2.8               | -3.2              | -14.4               | -8.9              | -11.6             | -23.6                   | -6.1              | -14.8             |
| Bosnia and Herzegovina | -19                     | -11               | -14               | -1.7                | -4.1              | -3.3              | -20.7                   | -15.1             | -17.3             |
| Bulgaria               | 6.2                     | -4.9              | 0.6               | -6.9                | -0.4              | -3.6              | -0.7                    | -5.3              | -3.0              |
| Croatia                | -2.4                    | -0.8              | -1.7              | -1.6                | -5.2              | -3.4              | -4.0                    | -6.0              | -5.1              |
| FYROM                  | 0.8                     | -3                | -1.1              | -4.8                | -2.4              | -3.6              | -4.0                    | -5.4              | -4.7              |



|                          |       |       |       |       |      |       |       |       |       |
|--------------------------|-------|-------|-------|-------|------|-------|-------|-------|-------|
| Romania                  | -2.0  | -1.3  | -1.6  | -3.4  | -3.5 | -3.5  | -5.4  | -4.8  | -5.1  |
| Serbia and Montenegro    | n. a. | -4.4  | -4.8  | n. a. | -2.6 | -2.6  | -8.0  | -7.0  | -7.4  |
| SEE                      | -3.9  | -3.2  | -3.6  | -5.9  | -3.9 | -4.9  | -9.8  | -7.1  | -8.5  |
| Armenia                  | 1.4   | -8.9  | -3.6  | -18.1 | -4.0 | -11.0 | -16.7 | -12.9 | -14.6 |
| Azerbaijan               | -13.8 | -12.9 | -12.9 | -6.0  | -1.9 | -3.9  | -19.8 | -14.8 | -16.8 |
| Belarus                  | -3.8  | -2.1  | -2.8  | -3.2  | -1.4 | -2.3  | -7.0  | -3.5  | -5.1  |
| Georgia                  | -7.4  | -3.6  | -5.6  | -13.1 | -3.8 | -8.4  | -20.5 | -7.4  | -14.0 |
| Kazakhstan               | -4.3  | -0.2  | -2.2  | -4.9  | -1.6 | -3.3  | -9.2  | -1.8  | -5.5  |
| Kyrgyz R.                | -4.3  | -0.2  | -1.7  | -9.3  | -8.0 | -8.7  | -13.6 | -8.2  | -10.4 |
| Moldova                  | 1.0   | -8.2  | -3.7  | -10.2 | -1.1 | -5.6  | -9.2  | -9.3  | -9.3  |
| Russia                   | 10.2  | 9.1   | 9.7   | -7.4  | 0.6  | -3.4  | 2.8   | 9.7   | 6.3   |
| Tajikistan               | -3.5  | -4.1  | -3.3  | -11.8 | -1.1 | -6.5  | -15.3 | -5.2  | -9.8  |
| Turkmenistan             | 13.5  | -6    | 3.8   | -3.1  | -0.9 | -2.0  | 10.4  | -6.9  | 1.8   |
| Ukraine                  | 8.3   | 4.5   | 7     | -11.2 | -0.5 | -5.8  | -2.9  | 4.0   | 1.2   |
| Uzbekistan               | 4.0   | 2.3   | 3.3   | -7.6  | -1.4 | -4.5  | -3.6  | 0.9   | -1.2  |
| CIS                      | 1.3   | -2.5  | -0.6  | -8.8  | -2.1 | -5.5  | -7.5  | -4.6  | -6.1  |
| All transition countries | -0.9  | -2.9  | -1.9  | -5.5  | -3.0 | -4.3  | -6.4  | -5.9  | -6.2  |

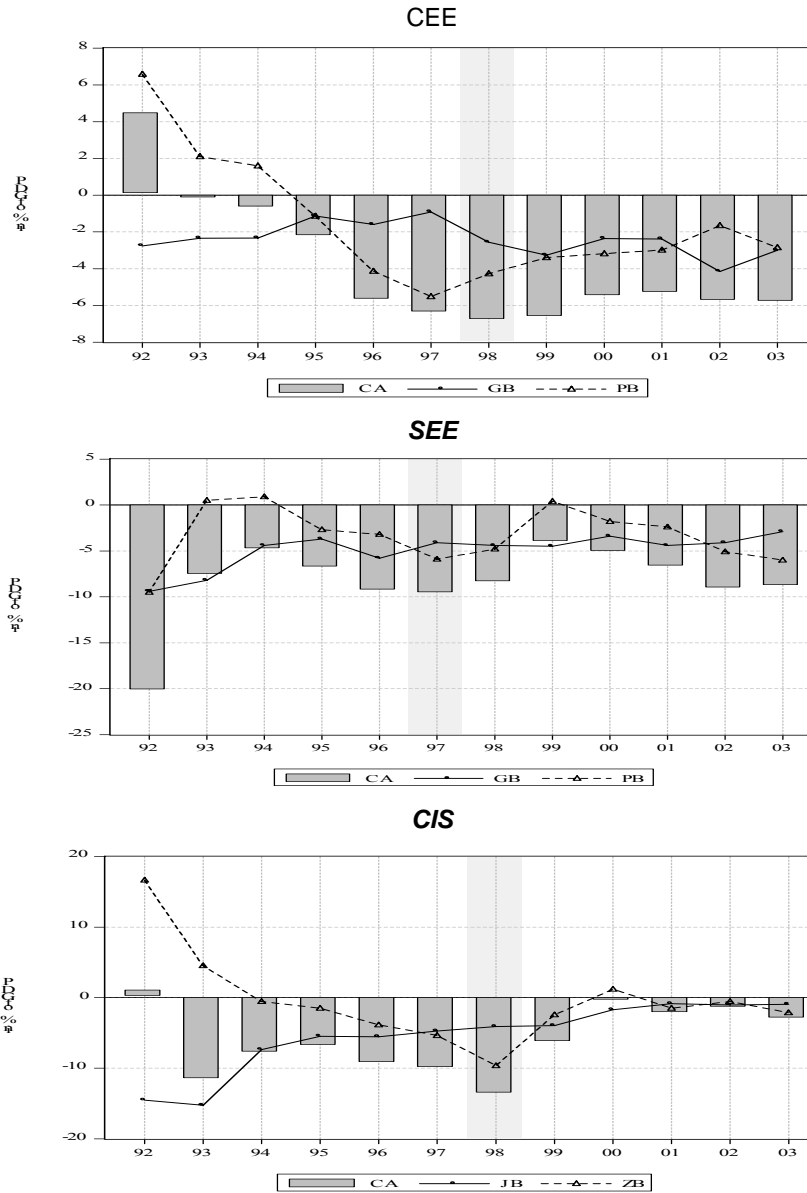
Sources: WDI (2004), EIU (2004), EBRD (2004), own calculations.

Similar, but even more intensive current account deficit dynamics were noticed in the CIS region by achieving the top average current account deficit at a significantly higher level (13.7 percent of GDP) than the CEE region in 1998. The major contributors to such a huge deterioration in the current account balance were some countries in the region with current account deficits above 20 percent of GDP (Turkmenistan (37.4), Azerbaijan (30.7), etc.). Several factors contributed to this development. First, many countries in the region experienced large losses in their terms of trade as prices for the energy imports from the former Council for Mutual Economic Assistance (CMEA) trading partners moved to market-determined levels. Second, these countries ran high negative fiscal imbalances as the authorities tried to absorb the revenue and expenditure pressure associated with sharp falls in the national income and fiscal restructuring (see Table 3). Third, as a result of the slow progress in building a competitive and diversified export sector the trade liberalization mainly stimulated imports of consumer goods and services. As a response to the Russian crisis, the average current account deficits narrowed in the group. However, in many cases the deficits remained high – around or even above 10 percent of GDP (Azerbaijan (15.9), Armenia (8.1), etc.) on average in the recent 2001-2003 period. On the other hand, the SEE region achieved the highest average current account deficit with around 20 percent of GDP in 1992 due to the enormous deficit occurred in Albania (68.5 percent). Later, these huge external imbalances improved significantly. However, at the beginning of the second half of the 1990s and in the first years of the 21st century they deteriorated again. Eventually, the average current account deficit was 8.2 percent of GDP in 2001-2003 in comparison to the previous three years, when it averaged out at 5.9 percent of GDP (see Figure 3).

**Figure 3**



Average current account balance (CA), budget balance (GB) and private balance (PB) in the transition countries (in percentage of GDP; un-weighted averages)



Sources: WDI (2004), EIU (2004), EBRD (2004), own calculations.



## 5. Development of investment and saving rates in the transition countries

At the start of the transition more than a decade ago the investment-to-GDP ratio in all the transition countries practically bottomed out in line with the drop in output (see Figure 4). Moreover, much of the capital stock at that time became obsolete overnight. Afterwards, investment rebounded, particularly in the CEE region (an average of some 28 percent of GDP in 1998), where the countries intensively struggled to transform their economies into market-oriented ones. Nevertheless, the rise in total investment in most of the transition countries during the 1990s was largely concentrated in the business sector. In fact, in most transition countries the average government capital expenditure was less than 5 percent of GDP over the period. However, as part of the process of real convergence, the investment ratio, also including public investment, may have to rise further to maintain strong economic growth.

The various structural reforms being undertaken in the transition countries should lead to an increase in the marginal productivity of domestic investment. Consequently, the further reform of financial markets, particularly in the SEE and CIS regions, with respective investment rates of only around 13 and 18 percent of GDP in the 2001-2003 period, are needed to ensure efficient and productive capital allocation. Moreover, in order to spur growth potential and boost the capacity to service future debt repayments, in the transition countries external borrowing for investment purposes is preferred to borrowing for consumption purposes. In this respect, the capital inflows, in particular the FDI, have been crucial in supporting these countries' stronger investment needs. In fact, for the transition countries it may be optimal to attract foreign savings and direct them to productive investment. The data suggest that CEE has been the most successful region, with its net FDI averaging out at almost 5 percent of GDP, whereas the CIS region attracted a net FDI of just above 4 percent of GDP on average over the period 1992-2003.<sup>1</sup> These figures are much higher than in the developed countries, especially in the EU-15, which averaged less than 3 percent of GDP in the same period.

In most transition countries, during the pre-transition era the domestic saving rates were exceptionally high. At the end of the 1980s the average saving rates of CEE, SEE and CIS were 32.9, 30.7 and 28.8 percent of GDP, respectively. These figures were relatively high, especially given the EU-15 member states' average saving rate of only some 20 percent of GDP in the same period.<sup>2</sup> However, saving rates within the transition economies differed widely, with Poland on top (42.7 percent) in 1989 and Tajikistan (12.5) and Kyrgyz Republic (13.1) at the bottom. Denizer and Wolf (2000) revealed three main factors which effected savings in the pre-transition era: first there were 'planned' savings for funding 'centrally planned' investment. Second, the lack of consumer goods exposed limits on consumption below the desired levels and consequently induced so-called 'involuntary savings'. Third,

<sup>1</sup> In the period 2000-2003 the economies most attractive to FDI in the CEE region were Slovakia and the Czech Republic with an average net FDI of 8.8 and 8.5 percent of GDP, respectively. In the CIS region, the biggest attractions are Azerbaijan and Kazakhstan with an average of 13.6 and 9.1 percent of GDP, respectively, in the same period.

<sup>2</sup> The EU-15 average savings rate has remained stable at around 20 percent of GDP since then.

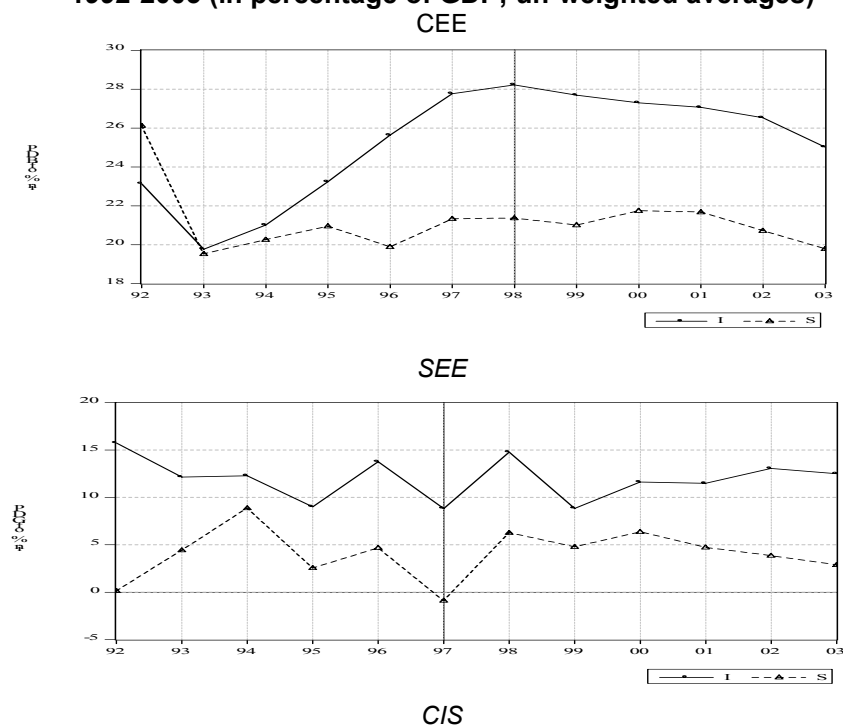


savings that were voluntary but driven by expectations of a systemic change, e.g. reflecting expectations of the greater availability of goods.

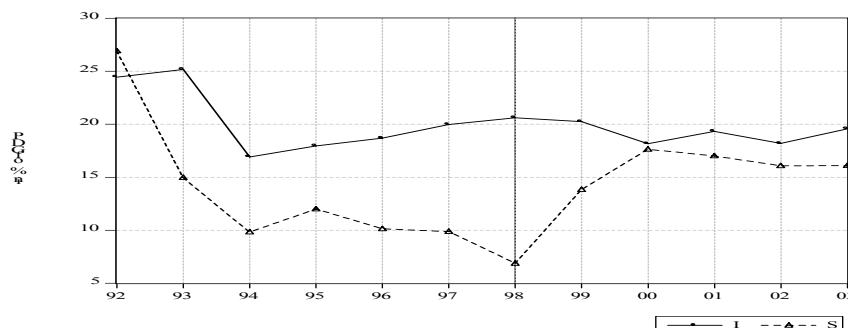
With the start of the transition process, the drop in domestic saving rates was enormous. Schrooten and Stephan (2003) pointed out at least three important factors which should be taken into account: consumption constraint, the savings overhang inherited from the past, and the massive uncertainty at the beginning of the transition process (high inflation, high unemployment, GDP decline etc.). However, a relatively slow recovery has been noticed despite huge differences both between and within the group of transition countries. For example, saving rates in CEE have stabilized at around 20 percent of GDP (the highest in Czech Republic with around 26 percent, the lowest in Poland with around 15 percent) on average in recent years.

**Figure 4**

**Average domestic savings and investment in transition countries, 1992-2003 (in percentage of GDP; un-weighted averages)**







Sources: WDI (2004), EIU (2004), EBRD (2004), own calculations.

On the other hand, in spite of significant saving rates improvements in CIS since 1998 they have recently remained quite low, at around 17 percent of GDP (the highest in Russia with around 32 percent, the lowest in Moldova with even a negative savings rate of around 12 percent).<sup>1</sup>

A decomposition of the external imbalance between savings and investment shows that the main determinant of growing current account deficits has been, in general, a remarkable increase in the average investment rate in CEE and a significant decline in the average saving rate in SEE and CIS in the 1992-2003 period.<sup>2</sup> Indeed, the trends presented above mainly suggest an inter-temporal approach to the current account, where transition countries (in particular CEE) use foreign savings to cushion their consumption in the face of unusually high investment needs. Moreover, consumption smoothing in the inter-temporal approach to the current account predicts a lower saving rate as private agents increase their consumption today based on expectations of a higher income in the future. In the case of transition countries, in particular in the latter stages of the transition process, the recent liberalization of financial markets and steadily improving access to credit by the domestic private sector might be confronted with a declining saving rate as uncertainty becomes reduced and liquidity constraints are eased.<sup>3</sup>

The dramatic drop of the domestic savings ratio caused the deterioration of the Romanian current account situation. The savings ratio kept on dropping in the first half of the last decade (from 30% in 1989 to 22,9% in 1992) due to the negative real interest rates in the following period and to the high inflation rate that stimulated the consumption. This ratio was stabilized at some low levels (14% in 1998, 13,4% in 1999, 15,2% in 2000, 17% in 2001 and 19,7% in 2002).

<sup>1</sup> Due to data deficiencies it is hard to estimate a reliable level of the saving rate for the SEE region. Nevertheless, according to the available data almost all economies in the region have relatively low or even negative saving rates.

<sup>2</sup> In fact, international comparisons (see MFR, 1996) suggest that low and falling saving rates make current account deficits less sustainable and potentially make the economy fragile.

<sup>3</sup> Rodrik (2000) estimated that a 1-percentage point increase in the private-credit-to-income ratio would lower the long-term private saving rate by 0.74 of a percentage point in five CEE economies.



### **The Impact of the National Bank of Romania's Monetary Policy**

Measured investment rates actually showed an increase. The rise of the investments was mostly based on the rapid accumulation of the stock during 1990-1992 when the output was low. After a period of declining of investments in the whole region, investments share of GDP rise significantly starting with 1997-1999, reaching 23% in 2002 due to the foreign investments inflows, relative macroeconomic stability and the liberalization of the capital flows that started in 1999.

The prognosis for the investments ratio shows their improvement to 26% in 2006 and for the savings ratio a rise to 22% in 2006 is expected.

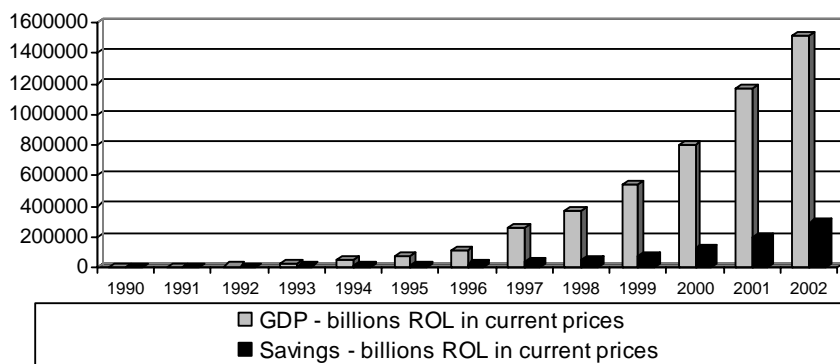
The Romanian experience regarding the GDP evolution is quite different from the one of other countries in the region. The relaunch of the economic growth in 1993 was accompanied by the improvement of the current account situation. Although the current deficit remained large (the average represented 3,8% of GDP) during 1993-1996, still it was lower than an average of 7,5% of GDP during 1990-1992. That situation was based on the public savings that began to rise starting from 1992, although the private savings remained low.

The sharp depreciation of the national currency in real terms in 1996 associated with a rapid rise of the inflation rate and with an important economic and political crisis. After the elections from 1996, when the reformists won, the current account situation improved, but its financing was mainly based on the foreign direct investments that have started to rise since then to present times.

World wide the determinant factor of the investment process is represented by the saving process. But the savings level directly depends on some organizationing conditions that could stimulate it such us: the incomes level, the quality of the national currency, the level of the market interest rate, the stable economic environment, the tax system etc. These conditions were not accomplished in Romania in the last transition decade. Although in the last years the savings ratio faces an ascendent trend, it is still very low comparing not only to the developed countries, but to the other Central and Eastern European Countries as well.

**Figure 5**

#### **The GDP and the volume of the domestic savings in Romania**



Source: Author's computations using the statistical data from the NBR Annual Reports and Monthly Bulletins.



The drop in the savings was the main cause of the reduction of the investments in the Romanian economy. The participation of the Ministry of Finance in the market in order to attract the available funds in the economy by offering higher interest rates than the ones in the market didn't support either the relaunch of the saving process oriented to the productive objectives, because those funds were not directed to some economic objectives and so, they didn't brought profits.

Given those conditions the NBR suffocated the economy by using high interest rates of the banking system and thus by cutting down the investments policy.

The NBR's Governor Mugur Isarescu stressed this situation at the beginning at 1999 when he emphasized that the dramatic drop of the domestic savings ratio from 30% in 1989 to almost 14% in 1998 was mostly due to the reduction of the enterprises saving process. Moreover, the numbers showed that the state-owned enterprises didn't save at all and their unique function was to pay the wages. The Governor also said that because of the lack of the domestic savings and of the external financing, the public deficit could have been financed only using inflationary methods. And without the domestic savings there weren't any investments resources.

After such a long period when the savings decreased and badly affected the entire economy, the savings started to recover during 2003-2005 as a result of laxing the NBR's monetary policy. So, finally, in 2003, the deposits (denominated in ROL) of the economic agents rose with 58,3% (39% in real terms) comparing to 2002 and the ones denominated in euro also rose but only with 6,8% (the deposits of the physical persons rose, but the ones of the economic agents slowly decreased). In 2005, the domestic currency deposits of the economic agents rose with 63,9% comparing to 2004 (51,6% in real terms) and the foreign currency deposits also rose with 49,4% (this time, the most important rise was attributed to the deposits of the economic agents – 81,5%).

## **6. Conclusions**

In the first decade of transition, the NBR monetary policy based mostly on some very restrictive monetary instruments such as the high discount rate and high minimum reserves ratio. Their high levels comparing to the ones in the other transition countries maintained high interest rates in the entire banking system and that didn't support the real economy by stimulating the domestic investments. Moreover, the high domestic interest rates didn't manage to attract the foreign investments; they dropped too, after a boom at the beginning of '90, because of the domestic political and economic conditions. In the present, the NBR reduced their levels and mainly uses less restrictive and more flexible, adequate instruments that don't influence firstly the interest rates on the monetary market, but still manage to influence the banking credits (such as the open-market and reverse repo transactions).

So, the Romanian monetary policy didn't support the efforts of the economy for recovering. During almost the entire last decade, it was a tight policy oriented to target inflation and thus neglecting the other macroeconomic variables such as the savings (discouraged by the high and persistent inflation) and investments that would sustain the economic growth. This led to major imbalances at the macroeconomic level and they affected badly all the economic aspects. The largest and lasting imbalance was the external one.

The current account imbalance based on the drop of the national saving ratio can be generated either by the diminishing of the private savings or by the diminishing of the public ones (large public deficits). A fall in national savings caused by a lower public savings is potentially more dangerous than a fall in private savings, because a fall in private savings is more likely to be a transitory phenomenon while structural public sector deficits are often long-lasting and may result in an unsustainable increase of foreign debt.

In general, the worsening of the current account has been caused by a sharp recovery of national investment rates driven by the return to positive growth. National saving rates have generally grown but more slowly than national investment rates or they have remained stagnant, especially due to the resumption of growth that has led to an increase in consumption rates (Bulgaria, Romania). At some extent, the low level of the savings was due to the large budgetary deficits in almost every country in the region. The data suggest that most of the improvement is due to an increase in national savings rate. While private savings as a share of GDP have remained stable, there has been an improvement in public savings. Still, in Romania, the savings rates were very low, due to the negative real interest rates that stimulated consumption and due to the high inflation rates.

In some countries in the region, the widening of the public deficits seemed to happen in the same time with the widening of the current account deficits. In Romania and Bulgaria, the data regarding the savings are not complete for comparisons or there is difficult to analyze them because of the often changes of the inflation rate in the last decade (the low savings level was also due to the sudden and frequent changes of the fiscal policy). In the last decade, the low rate of savings and investments generated serious problems for the Romanian current account. So, the current account deficits were structural in our country's case.

## References

- Adalet, M., and Eichengreen, B. (2005) 'Current Account Reversals: Always a Problem?' NBER Conference: G7 Current Account Imbalances: Sustainability and Adjustment, June 2005.
- Aristovnik, A. (2005) 'Public Sector Stability and Balance of Payments Crises in Selected Transition Economies.' *Democratic Governance for the XXI Century: Challenges and Responses in CEE Countries* May 2005.
- Aristovnik, A. (2005) 'Current account reversals in selected transition countries', Scientific Publication 2005, 4th International Symposium Economy & Business 2005, Economic Development and Growth, Bourgas, Bulgaria.
- Basno, Cezar, Dardac, Nicolae (2000), *Products, performances and banking costs*, Economic Publishing House, Bucharest, 2000.
- Berea, Aurel Octavian (2001) *Banking strategy*, Expert Publishing House, Bucharest, 2001.
- Berea, Aurel Octavian (1999) *Contemporary trends for the banking theory and practice*, Expert Publishing House, Bucharest, 1999.
- Brendea, Cosmin, Zamfirescu, Marius, Dăeanu, Eugen Valentin, Ghiță, Marilena (2001) *The risk and the performance of the Romanian credit*, Bucharest, 2001.

- Bussière, M., Fratzscher, M., and Müller G. J. (2004). 'Current account dynamics in OECD and EU acceding countries – an inter-temporal approach.' Frankfurt: EIB, *Working Paper Series*, No. 311.
- Chinn M., and Prasad, E. S. (2000). 'Medium-term Determinants of Current Accounts in Industrial and Developing Countries: An Empirical Exploration', *NBER Working Paper*, No. 7581.
- Clarida, R., M. Goretta and M. Taylor (2005). 'Are There Thresholds of Current Account Adjustment?' *NBER Conference: G7 Current Account Imbalances: Sustainability and Adjustment*, June 2005.
- Coricelli, F., and Jazbec, B. (2001). 'Real Exchange Rate Dynamics in Transition Economies.' *CEPR Discussion Papers*, No. 2869.
- Dănilă, Nicolae (2000) *The privatization of the banks*, Economic Publishing House, Bucharest, 2000.
- Debelle, G. and G. Galati (2005). 'Current Account Adjustment and Capital Flows.' *BIS Working Papers No. 169*.
- Denizer, C., and Wolf, H. C. (2000). 'The Savings Collapse during the Transition in Eastern Europe.' Washington: World Bank, *Working Paper*.
- Edwards, S. (2001). 'Does the Current Account Matter?', *NBER Working Paper*, No. 8275.
- Edwards, S. (2004). 'Thirty Years of Current Account Imbalances', Current Account Reversals and Sudden Stops, *NBER Working Paper*, No. 10276.
- Freund, C. (2000). 'Current Account Adjustment in Industrial Countries.' *International Finance Discussion Papers*, No. 692.
- Freund, C., and Warnock, F. (2005). 'Current Account Deficits in Industrial Countries: The Bigger They Are, The Harder They Fall?' *NBER Conference: G7 Current Account Imbalances: Sustainability and Adjustment*, June 2005.
- Kamin, S., Schindler, J., and Samuel, S. (2001). 'The Contribution of Domestic and External Factors to Emerging Market Devaluation Crises: An Early Warning Systems Approach', *International Finance Discussion Papers*, No. 711.
- Manole, Victor, Mărgineanu, Alexandru, Stanca, Iosif, Mitrache, Ștefan (1999) *The firms and the banks*, Tribuna Economică Publishing House, Bucharest, 1999.
- Melecky, M. (2005). 'The Impact of Current Account Reversals on Growth in Central and Eastern Europe.' *Economics Working Paper Archive at WUSTL*, No. 0502004.
- Miller, N. C. (2002). *Balance of Payments and Exchange Rate Theories*. Cheltenham: Edward Elgar Publishing Limited.
- Pintea, Alexandru, Ruscanu, Gheorghe (1999) *Banks in the Romanian economy*, Economic Publishing House, Bucharest, 1999.
- Puiu, Alexandru (2003) *Banking strategies – one of the main causes for the Romanian crisis*, Independența Economică Publishing House, Pitesti, 2003.
- Rodrik, D. (2000). 'Saving Transitions'. *World Bank Economic Review*, 14(3): 481-507.
- Rotaru, Constantin (2001) *The banking performance management*, Expert Publishing house, Bucharest, 2001.



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- Roubini, N., and Wachtel, P. (1999). 'Current-Account Sustainability in Transition Economies.' *Balance of Payments, Exchange Rates, and Competitiveness in Transition Economies*, Kluwer Academic Publishers.
- Schrooten, M., and Stephan, S. (2003). 'Back on track? Savings Puzzles in EU-Accession Countries.' Berlin: German Institute for Economic Research. *Discussion Papers of DIW Berlin*, No. 306.
- Svejnar, J. (2002). 'Transition Economies: Performance and Challenges.' *William Davidson Working Paper*, No. 415.
- Zanghieri, P. (2004). 'Current Account Dynamics in New EU Members: Sustainability and Policy Issues.' CEPII, *Working Papers*, 2004-07.