

## Features of Banking Systems from Central and Eastern European Countries

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### **Abstract**

*The aim of the paper is to analyse the main features of the banking systems of five countries from Central and Eastern Europe (Czech Republic, Poland and Hungary, which adhered at the European Union in 2004, Bulgaria and Romania, which became member of the European Union at first January of 2007). In the study we took into consideration the Republic of Slovenia and Slovakia - new member states of the Monetary Union - to highlight the discrepancies between countries and the efforts necessary on the way to convergence.*

*The analyses undertaken in the paper show some common features of the banking systems from these countries, such as: the dominant position of the banks in the national financial systems, even if in the last years we can observe the increased role played by other financial intermediaries (insurance companies, investments funds, leasing companies); the little role of capital markets in financing the companies; the prevalence of foreign-owned banks, with positive influence on the development and consolidation of banking system, the rapid increase of non-government credit (especially, credits denominated in foreign currencies).*

*Even if these banking systems have achieved important progresses, their development and efficiency is different from one country to another. While in some countries, the banking sector development is similar to the Euro Zone, in other countries there are significant disparities. In the context of the current financial crisis, we intend to show the latest transformations of the banking systems from these countries.*

Keywords: *financial system, banking sector, financial intermediation, banking credits, lending structure.*

JEL classifications: G21

### **Introduction**

As a consequence of the restructuring and privatization process, the alignment of banking legislation to European legislation requirements, diversification of products and services portfolio offered by the banks, the banking sector of the East and Central European countries registered in recent years a significant consolidation and represent the most important component of the financial system.

The dominant position of the banking sector within the financial system of the East and Central European countries is illustrated by the banking assets that hold, on an average, 70% of the total assets of the financial system. As a matter of fact, the financial system of

all the European Union member states is centered on banking financial intermediaries. In this respect, it is estimated that the stability and the efficiency of banking sector is an essential precondition for sustainable economic development of the states and, at the same time, for providing a good running of the nominal and real convergence process. Likewise, a solid and competitive banking sector allows the efficient transmission of monetary policy signs towards the real economy and, thus, contributing to achieve the basic objective of the central banks of the surveyed countries and namely, the provision and maintenance of price stability.

The financial system structure in the case of the considered countries can be followed based on Table 1. The data illustrated in Table 1 shows, on one hand, the dominant position of the banking sector within the financial system and, on the other hand, the fact that although the non-banking financial institutions hold a reduced share of the total assets of the financial system, in recent years they recorded a fast increase (mainly, the insurance companies, the investment funds, and leasing companies). Such an evolution is due to the macroeconomic stabilization, structural changes within the non-banking sector, as well as to the measures taken by monetary authorities, mainly in Romania and Bulgaria in order to limit the increase of bank credits that engaged the rise of the credits given by non-banking financial institutions, especially by the leasing companies.

**Table 1: The structure of financial system in selective countries from Central and Eastern Europe (in %of total assets of financial systems)**

| Country        | Year | Banks | Insurance companies | Investment companies, investment and mutual funds | Other non-bank financial corporations |
|----------------|------|-------|---------------------|---|---------------------------------------|
| Slovenia       | 2005 | 71.80 | 8.00                | 5.40  | 14.80                                 |
|                | 2006 | 72.30 | 8.30                | 6.00  | 13.40                                 |
|                | 2007 | 73.20 | 8.60                | 7.10  | 11.10                                 |
| Slovakia       | 2005 | 82.80 | 7.30                | 7.40  | 2.50                                  |
|                | 2006 | 80.10 | 8.20                | 7.40  | 4.30                                  |
|                | 2007 | 79.50 | 7.80                | 7.70  | 5.00                                  |
| Romania        | 2005 | 83.70 | 4.10                | 3.60  | 8.60                                  |
|                | 2006 | 83.80 | 4.10                | 4.30  | 7.80                                  |
|                | 2007 | 82.16 | 4.00                | 4.13  | 9.71                                  |
| Poland         | 2005 | 70.18 | 10.72               | 7.34  | 11.76                                 |
|                | 2006 | 66.68 | 10.60               | 9.67  | 13.05                                 |
|                | 2007 | -     | -                   | -   | -                                     |
| Czech Republic | 2005 | 73.80 | 8.00                | 3.70  | 14.50                                 |
|                | 2006 | 73.30 | 7.70                | 3.70  | 15.30                                 |
|                | 2007 | 74.20 | 7.00                | 3.80  | 15.00                                 |

*Source: restructured data after*

- 1 Bank of Slovenia, 2007-2008;
- 2 Czech National Bank, 2005-2007;
- 3 National Bank of Slovakia, 2005-2007;
- 4 National Bank of Romania, 2007-2008;
- 5 National Bank of Poland, 2006.

## Changes in the structure of banking sectors in the countries of Central and Eastern Europe

Transformations in the banking systems of the countries of Central and Eastern Europe taken in the analysis may be evidenced by a synthetic indicator calculated by the European Bank for Reconstruction and Development (EBRD), the assessment of banking reform and liberalization of interest rates. This indicator measures the degree of reform of the banking sector by liberalizing interest rates and the allocation of credit, the lending to the private sector, private ownership of the banking sector, the level of competition between banks, banks' solvency, the implementation of a regulatory framework and prudential supervision. The indicator values are between 1 and 4+ and have the following meaning: the value of 1 signifies reduced progress in the reform process, and the 4+ reflects a full convergence with international standards and performance of advanced industrial economies, a full convergence of banking laws and regulations with BIS standards, and a full range of banking services (EBRD, 2006).

The reform of the banking systems of the countries taken in the analysis, revealed by the EBRD indicator, may be pursued based on data in Table 2.

**Table 2: Assessment reform in the banking system based on the EBRD index, in some countries of Central and Eastern Europe in the period 1990-2008**

| Country         | 1990 | 1995 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|
| Bulgaria        | 1.0  | 2.0  | 3.0  | 3.0  | 3.3  | 3.3  | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 |
| Czech Republic  | 1.0  | 3.0  | 3.3  | 3.67 | 3.67 | 3.67 | 3.67 | 4.0  | 4.0  | 4.0  | NA   |
| Hungary         | 1.0  | 3.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Poland          | 2.0  | 3.0  | 3.3  | 3.3  | 3.3  | 3.3  | 3.3  | 3.67 | 3.67 | 3.67 | 3.67 |
| Romania         | 1.0  | 3.0  | 2.67 | 2.67 | 2.67 | 2.67 | 3.0  | 3.0  | 3.0  | 3.3  | 3.3  |
| Slovenia        | 1.0  | 3.0  | 3.3  | 3.3  | 3.3  | 3.3  | 3.3  | 3.3  | 3.3  | 3.3  | 3.3  |
| Slovak Republic | 1.0  | 2.7  | 3.0  | 3.3  | 3.3  | 3.3  | 3.7  | 3.7  | 3.7  | 3.7  | 3.7  |

Source: <http://www.ebrd.com/country/sector/econo/stats/tic.xls> [accessed on 6.03.2009]

A fundamental characteristic of reform in the analyzed countries is privatization, which was completed in a large number of countries and which has deeply affected the structure of bank ownership (see the data in table 3). This led to a significant decrease of shares owned by banks with state-owned majority capital in favor of the banks with private majority capital, that is foreign capital, especially in Romania - from 14.1% to 2.1%). By comparison, in Slovenia and in Poland, banks with state-owned majority capital hold for the moment the biggest part of the market.

The privatization of the banking sector was considered the most important way through which foreign banks could step into the bank markets of Eastern and Central Europe countries. In this context, it is to be mentioned the most important privatization made until now in Central and Eastern Europe, that is the selling of the Commercial Bank of Romania at the end of 2005 to Erste Bank AG, which has determined in Romania the significant increase of the percentage of assets held

by the banks with foreign majority capital out of the total assets of the banks, from 59.2% at the end of 2005 to 87.3 % at the end of 2007.

Foreign banks prevail mostly in the Slovak Republic, Romania, the Czech Republic and Bulgaria (see data in table 3). In these countries, foreign banks are the leading actors on the domestic bank markets, hence their behavior influences greatly the bank credit operations and generally the level of financial mediation. In comparison to the mentioned countries, the percentage of the foreign capital is much lower especially in the Slovak Republic (only of 28.8% at the end of 2007), where, on the one hand, banks with state-owned majority capital have hold a significant percentage of the market (14.4% at the end of 2007), and on the other hand, the private capital which is mostly domestic.

**Table 3: Asset shares of state-owned banks and foreign-owned banks<sup>1</sup>, in some countries in Central and Eastern Europe in the period 1990-2008**

| Country         | 2002 |      | 2003 |      | 2004 |      | 2005 |      | 2006 |      | 2007 |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | (1)  | (2)  | (1)  | (2)  | (1)  | (2)  | (1)  | (2)  | (1)  | (2)  | (1)  | (2)  |
| Bulgaria        | 14.1 | 75.2 | 2.5  | 82.7 | 2.3  | 81.6 | 1.7  | 74.5 | 1.8  | 80.1 | 2.1  | 82.3 |
| Czech Republic  | 4.6  | 85.8 | 3.0  | 86.3 | 2.9  | 84.9 | 2.5  | 84.4 | 2.2  | 84.7 | 2.4  | 84.8 |
| Hungary         | 10.7 | 85.0 | 7.4  | 83.5 | 6.6  | 63.0 | 7.0  | 82.6 | 7.4  | 82.9 | 3.7  | 64.2 |
| Poland          | 26.6 | 70.7 | 25.8 | 71.5 | 21.7 | 71.3 | 21.5 | 74.3 | 21.1 | 74.2 | 19.5 | 75.5 |
| Romania         | 43.6 | 52.9 | 40.6 | 54.8 | 7.5  | 58.5 | 6.5  | 59.2 | 5.9  | 87.9 | 5.7  | 87.3 |
| Slovenia        | 13.3 | 16.9 | 12.8 | 18.9 | 12.6 | 20.1 | 12.0 | 22.6 | 12.5 | 29.3 | 14.4 | 28.8 |
| Slovak Republic | 1.9  | 84.1 | 1.5  | 96.3 | 1.3  | 96.7 | 1.1  | 97.3 | 1.1  | 97.0 | 1.0  | 99.0 |

(1)- Asset shares of state-owned banks in per cent

(2)- Asset shares of foreign-owned banks in per cent

Source: EBRD, 2006, „Finance in transition“, Transition report, <http://www.ebrd.com/pubs/econo/series/tr.htm> [accessed on 6.03.2009]

The banking sector in the countries of Central and Eastern Europe is dominated by banks in Western Europe, especially the Austrian banks (Erste, Raiffeisen), French (Société Générale), Italian (UniCredit, Intesa), German (Commerzbank, BayernLB) and Dutch (ING), which is shown in Table 4.

In specialized literature (Hryckiewicz, 2008, p.5) tackling the banks with international operations, there are several factors which are very important for the selection of the location, such as: the potential of bank market from the host country, the legislation of the country of origin, economic growth rates of the origin and host country and the headquarters of the foreign bank. In the case of the Central and Eastern Europe countries which were taken into account for

<sup>1</sup> Asset share of state-owned banks (in per cent). Share of majority state-owned banks' assets in total bank sector assets. The state includes the federal, regional and municipal levels, as well as the state property fund and the state pension fund. State-owned banks are defined as banks with state ownership exceeding 50 per cent, end-of-year. Asset share of foreign-owned banks (in per cent). Share of total bank sector assets in banks with foreign ownership exceeding 50 per cent, end-of-year.

our study project, foreign banks were interested to extend their operations especially because of the high economic growth of bank markets in those countries, the low financial mediation, and the high level of interest rate.

**Table 4: Involvement of Western banks in the countries of Central and Eastern Europe in 2008**

| Country         | Main foreign banks                  |
|-----------------|-------------------------------------|
| Bulgaria        | UniCredit, OTP, Raiffeisen          |
| Czech Republic  | KBC, Erste, Soci t  G n rale        |
| Hungary         | KBC, BayernLB, Intesa               |
| Poland          | UniCredit, ING, Commerzbank         |
| Romania         | Erste, Soci t  G n rale, Raiffeisen |
| Slovenia        | Soci t  G n rale, Intesa, UniCredit |
| Slovak Republik | Erste, Intesa, Raiffeisen           |

Source: [http://osw.waw.pl/files/CEWEEKLY\\_21.pdf](http://osw.waw.pl/files/CEWEEKLY_21.pdf) [accessed on 6.03.2009]

From the point of view of the host country, this is interested in attracting the interest of foreign banks as they may contribute to the enhancement of stability, reliability and competitiveness of the banking sector, to the significant improvement of the banking practices further to the numerous advantages created, such as: better bank-risk management, bank product quality, range and price improvement, the enhancement of the efficiency of the banking operations further to the know-how added, technology and liquidities included, the facilitation of the access to foreign financing for the companies and the individuals of the host country.

Furthermore, foreign banks may contribute to the enhancement of the private sector credit in the host country, on the one hand, because they are not restricted by the conditions on the domestic market, and on the other hand because of the easy access to financing on the international financial markets, based on the reputation of the mother bank (Burcu, 2008, p.4).

Besides these advantages, the presence of the foreign banks also has certain limitations, the most important being the exposure of the host country to a high contagion risk. This is because the financial difficulties of the mother bank that take place when the origin country is in recession may affect their branches abroad. On the other hand, significant macroeconomic unbalances in the host country may determine the withdrawal of the foreign bank capitals or the renunciation of the mother banks to the financial support of their branches, with serious consequences, particularly in the financial stability of that country.

Another mutation that occurs in the structure of the bank sectors in all Central and Eastern European countries is the intensification of bank reinforcement, seen in the increase of the number of banks (see the data in table 5). If in the case of some countries, mostly the Czech Republic, Bulgaria and Hungary, we see a significant diminishing of the number of banks, in the case of other countries such as Poland, Romania, Slovakia we witness a divergent tendency, the number of banks increasing.

Against the background of banking reinforcement, it is worth noting that the decrease of the number of credit institutions was the result of numerous mergers and acquisitions and less the effect of banks financial distress.

**Table 5: The evolution of number of credit institutions in different countries in the period 2003-2009Q1**

| Country           | Number of credit institutions |      |      |      |      |      |        |
|-------------------|-------------------------------|------|------|------|------|------|--------|
|                   | 2003                          | 2004 | 2005 | 2006 | 2007 | 2008 | 2009Q1 |
| Bulgaria          | 35                            | 35   | 34   | 32   | 29   | 30   | 30     |
| Czech Republic    | 77                            | 70   | 56   | 57   | 56   | 54   | 54     |
| Hungary           | 222                           | 217  | 214  | 212  | 206  | 204  | 198    |
| Poland            | 660                           | 744  | 730  | 723  | 718  | 712  | 713    |
| Romania           | 39                            | 40   | 40   | 39   | 42   | 45   | 44     |
| Slovenia          | 33                            | 24   | 25   | 25   | 27   | 25   | 26     |
| Slovakia Republic | 22                            | 21   | 23   | 24   | 26   | 26   | 26     |
| MU                | 6623                          | 6427 | 6271 | 6157 | 6128 | 6570 | 6550   |
| EU                | 9054                          | 8908 | 8689 | 8514 | 8348 | 8525 | 8465   |

Note: PL data for the number of credit institutions include credit unions since 2004, whereas previously it included only commercial and cooperative banks.

Source: ECB, "EU Banking Structures", October, 2008; <http://www.ecb.int/pub/pub/prud/html/index.en.html>; <http://www.bsi.si/en/financial-data> [accessed on 5.03.2009]

The transformation of the structure of the bank system in the studied countries may be shown in the significant extension of the bank unit network (although in most countries the number of bank decreased), which shows that banks want to conquer as many market segments as possible and to provide quality products and services in order to attract customers and to make them loyal.

**Table 6: The evolution of number of local units (branches)/credit institution in different countries in the period 2003-2007**

|      | Number of local units (branches) |        |        |        |        | Number of local units (branches)/credit institution |      |      |      |      |
|------|----------------------------------|--------|--------|--------|--------|---|------|------|------|------|
|      | 2003                             | 2004   | 2005   | 2006   | 2007   | 2003  | 2004 | 2005 | 2006 | 2007 |
| BG   | NA                               | 5606   | 5629   | 5569   | 5827   | NA  | 160  | 165  | 174  | 200  |
| CZ   | 1670                             | 1785   | 1825   | 1877   | 1862   | 21  | 25   | 32   | 32   | 33   |
| HU   | 3003                             | 2987   | 3125   | 3243   | 3387   | 13  | 13   | 14   | 15   | 16   |
| PL   | 8688                             | 8301   | 10074  | 10943  | 11607  | 13  | 11   | 13   | 15   | 16   |
| RO   | 3387                             | 3031   | 3533   | 4470   | 6340   | 86  | 75   | 88   | 114  | 150  |
| SI   | 725                              | 706    | 693    | 696    | 711    | 21  | 29   | 27   | 27   | 26   |
| SK   | 1057                             | 1113   | 1142   | 1175   | 1169   | 48  | 53   | 49   | 48   | 44   |
| MU13 | 168730                           | 168476 | 169644 | 181499 | 183981 | 25  | 26   | 27   | 29   | 30   |
| EU27 | 206956                           | 211442 | 214925 | 228601 | 233581 | 22  | 23   | 24   | 26   | 27   |

Source: ECB, "EU Banking Structures", October, 2008; <http://www.ecb.int/pub/pub/prud/html/index.en.html> [accessed on 5.03.2009] end data processed based on ECB, "EU Banking Structures", October, 2008

The number of local units or branches per bank increased significantly (see the data in table 6), especially in Romania from 86 local units in 2003 to 150 in 2007, the level being five times higher in comparison to the EURO area. Furthermore, in Romania the highest rise of the number of local units was recorded, by 41.8% in 2007 in

comparison to 2006. These evolutions were recorded against the background of the significant extension of the banking mediation and of the banking retailing operations. Nevertheless, when we consider the bank density expressed by the number of credit institutions to 100.000 inhabitants, the level in Romania, kept relatively constant, is under the level of the other states and mostly under the level of MU13 and EU27 (see the data in table 7).

**Table 7: The evolution of the ratio bank density in different countries in the period 2003-2007**

| Country         | 2003 | 2004 | 2005 | 2006 | 2007 |
|-----------------|------|------|------|------|------|
| Bulgaria        | 0.45 | 0.45 | 0.44 | 0.42 | 0.38 |
| Czech Republic  | 0.76 | 0.69 | 0.55 | 0.56 | 0.54 |
| Hungary         | 2.19 | 2.15 | 2.12 | 2.11 | 2.05 |
| Poland          | 1.73 | 1.95 | 1.91 | 1.90 | 1.88 |
| Romania         | 0.18 | 0.19 | 0.19 | 0.18 | 0.20 |
| Slovenia        | 1.65 | 1.20 | 1.25 | 1.24 | 1.33 |
| Slovak Republic | 0.41 | 0.39 | 0.43 | 0.45 | 0.48 |
| MU13            | 2.12 | 2.05 | 1.99 | 1.94 | 1.92 |
| EU27            | 1.86 | 1.82 | 1.77 | 1.72 | 1.68 |

Source: data processed based on ECB, "EU Banking Structures", October, 2008; <http://www.ecb.int/pub/pub/prud/html/index.en.html> [accessed on 5.03.2009]

The enhancement of bank reinforcement in the Central and Eastern European countries also has effects on the bank market concentration, measured by the ratios Herfindahl - Hirschmann and the market share of the first five credit institutions (see the data in table 8). In the case of all the studied countries, we can see a tendency of decreasing the bank market concentration that, next to the increase of the number of banks with foreign-owned majority capital may be perceived as signs of enhancement of bank competitiveness. Furthermore, it is worth mentioning the situation in Poland where the concentration degree is much lower (in the case of both indices) in comparison to other countries, which means a higher competitiveness on the banking market. In all countries (except for Poland) including in EU27 and the Monetary Union, the first 5 credit institutions hold more than 50% of all banking assets.

**Table 8: The trend of the concentration index of banking market in different countries in the period 2003-2007**

| Country         | Herfindahl* Index |      |      |      |      | Weight of the 5 leading credit institutions in the total assets |      |      |      |      |
|-----------------|-------------------|------|------|------|------|---|------|------|------|------|
|                 | 2003              | 2004 | 2005 | 2006 | 2007 | 2003  | 2004 | 2005 | 2006 | 2007 |
| Bulgaria        | NA                | 721  | 698  | 707  | 833  | NA  | 52.3 | 50.8 | 50.3 | 56.7 |
| Czech Republic  | 11187             | 1103 | 1155 | 1104 | 1100 | 65.8  | 64.0 | 65.5 | 64.1 | 65.7 |
| Hungary         | 783               | 798  | 795  | 823  | 839  | 52.1  | 52.7 | 53.2 | 53.5 | 54.1 |
| Poland          | 754               | 692  | 650  | 599  | 640  | 52.0  | 50.0 | 48.5 | 46.1 | 46.6 |
| Romania         | 1251              | 1111 | 1115 | 1165 | 1041 | 55.2  | 59.5 | 59.4 | 60.1 | 56.3 |
| Slovenia        | 1496              | 1425 | 1369 | 1300 | 1282 | 66.4  | 64.6 | 63.0 | 62.0 | 59.5 |
| Slovak Republic | 1191              | 1154 | 1076 | 1131 | 1082 | 67.5  | 66.5 | 67.7 | 66.9 | 68.2 |

|                             |             |             |             |             |             |              |              |              |              |              |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| MU13<br>unweighted<br>avg.  | 579<br>983  | 599<br>997  | 642<br>1029 | 630<br>996  | 654<br>1006 | 40.5<br>54.2 | 41.6<br>54.2 | 42.6<br>54.9 | 42.8<br>54.4 | 44.1<br>54.7 |
| EU 27<br>unweighted<br>avg. | 545<br>1145 | 567<br>1114 | 600<br>1135 | 588<br>1104 | 628<br>1102 | 39.7<br>58.8 | 40.9<br>58.5 | 42.1<br>59.3 | 42.1<br>58.9 | 44.4<br>59.4 |

\* calculated as the sum of the square of the market shares for all credit institutions in a Member State

Source: ECB, "EU Banking Structures", October, 2008; <http://www.ecb.int/pub/pub/prud/html/index.en.html> [accessed on 5.03.2009]

### **Financial intermediation, lending structure and profitability of the banking system**

A significant sign of progress recorded by the banking sectors of East and Central European countries is represented by the increase of financial intermediation degree expressed both in the light of banking assets share of GDP and in the light of banking credits share of GDP (see the data of table 9). Such an evolution reflects the significant orientation of credit institutions to the real economy and their return to the financial intermediation function.

The significant remaking of the financial intermediation process, mainly in Bulgaria and Romania (see the data of table 9) was determined by the changes occurred at the offer level and at banking credits demand.

The increase of banking credits offer was determined by the decrease of credit risk of the real economy based on the improvement of macroeconomic conditions (the decrease of inflation rate, of interest rate, national currency appreciation), the existence of a liquidity excess in the banking sector and also by the competition increase on the banking market following foreign capital entries). Likewise, the increase of banking credits offer was sustained by the creation of credit offices, by improving the credit guarantee regulations, by improving the banking legislation, of audit and accounting practices.

Regarding the credit demand, it increased as a consequence of improving the macroeconomic conditions (decrease of inflation rate, of interest rates, economic growth acceleration), the initial lowered indebtedness degree of population and increasing of its income (Sirtaine, 2007, p. 7).

Based on the data shown in table 9, we may find out that of the surveyed countries, Slovenia is the country with the highest degree of financial intermediation, and, at the opposite side, there is Romania that, although recorded remarkable progresses on the financial intermediation level, is under the level of the other countries and well below EU27 average and Euro zone. At the end of 2007, the financial intermediation degree measured by the share of banking assets of GDP was of 334% of EU27 and of 351.4% of euro zone (ECB, 2008, p. 15). Such a situation shows that the Romanian banking market features a great growth potential. The significant difference between the financial intermediation degree in Romania and EU27, for example, is considered as normal if we take into account the GDP per capita that is much below the average of EU27. In this respect, it is worth mentioning that, in Romania, at the end of 2007, the GDP per capita expressed at the purchasing power parity was at only 40.3% of EU27 average (National Bank of Romania, 2007, p. 16).

**Table 9: Evolution of financial intermediation in different countries in the period 2003-2007**

|                        | 2003 | 2004 | 2005  | 2006  | 2007  | 2007/2003 (%) |
|------------------------|------|------|-------|-------|-------|---------------|
| <b>Bulgaria</b>        |      |      |       |       |       |               |
| - bank assets/GDP (%)  | 50.0 | 64.2 | 76.8  | 85.5  | 104.5 | 109           |
| - bank loans/GDP (%)   | 26.0 | 34.4 | 41.4  | 44.8  | 67.1  | 158           |
| <b>Czech Republic</b>  |      |      |       |       |       |               |
| - bank assets/GDP (%)  | 99.9 | 93.8 | 97.7  | 97.4  | 104.7 | 4.80          |
| - bank loans/GDP (%)   | 38.7 | 37.5 | 40.7  | 43.9  | 50.3  | 37.80         |
| <b>Hungary</b>         |      |      |       |       |       |               |
| - bank assets/GDP (%)  | 76.4 | 80.9 | 89.8  | 99.1  | 107.7 | 40.97         |
| - bank loans/GDP (%)   | 36.5 | 39.5 | 44.3  | 48.6  | 53.4  | 46.30         |
| <b>Poland</b>          |      |      |       |       |       |               |
| - bank assets/GDP (%)  | 62.6 | 62.5 | 64.2  | 68.6  | 72.1  | 15.18         |
| - bank loans/GDP (%)   | 27.6 | 26.1 | 27.2  | 31.2  | 37.3  | 35.14         |
| <b>Romania</b>         |      |      |       |       |       |               |
| - bank assets/GDP (%)  | 31.2 | 37.1 | 45.2  | 50.9  | 64.3  | 106           |
| - bank loans/GDP (%)   | 15.3 | 16.6 | 20.8  | 26.8  | 36.6  | 139           |
| <b>Slovenia</b>        |      |      |       |       |       |               |
| - bank assets/GDP (%)  | 87.8 | 93.8 | 104.2 | 113.4 | 125.8 | 43.28         |
| - bank loans/GDP (%)   | 43.3 | 48.7 | 56.0  | 67.6  | 83.6  | 93.07         |
| <b>Slovak Republic</b> |      |      |       |       |       |               |
| - bank assets/GDP (%)  | 80.6 | 85.4 | 98.7  | 88.4  | 89.7  | 11.29         |
| - bank loans/GDP (%)   | 32.9 | 33.0 | 37.5  | 40.3  | 44.6  | 35.56         |

Source: Raiffeisen Research, "CEE Banking Sector Report", 2008, [www.rzb.at/eBusiness](http://www.rzb.at/eBusiness) [accessed on 5.03.2009] end data processed based on Raiffeisen Research, "CEE Banking Sector Report", 2008

The banking credits given to the economy recorded an enhanced growth, mainly in Romania and Bulgaria (see the data of table 10), evolution justified by the initial very low levels of financial intermediation and by its convergence process towards the levels of EU developed countries.

**Table 10: Evolution of loans granted to the economy of credit institutions in the period 2005-2007 (in % year on year in Euro terms)**

|      | increase in loans granted to the economy by credit institutions |       |       | increase in loans granted to non-financial corporations |       |       | increase in loans granted to households |        |       |
|------|---|-------|-------|---|-------|-------|---|--------|-------|
|      | 2005  | 2006  | 2007  | 2005  | 2006  | 2007  | 2005                                    | 2006   | 2007  |
| BG   | 34.40   | 23.35 | 64.67 | 22.91   | 18.81 | 72.93 | 58.36                                   | 30.70  | 52.49 |
| CZ   | 28.87   | 40.11 | 29.75 | 21.94   | 26.87 | 22.31 | 39.23                                   | 36.60  | 38.77 |
| HU   | 15.33   | 18.46 | 16.17 | 10.84   | 13.44 | 10.91 | 22.94                                   | 26.14  | 23.40 |
| PL   | 16.45   | 25.05 | 33.13 | 4.51  | 14.45 | 33.13 | 29.38                                   | 34.32  | 47.27 |
| RO   | 57.77   | 72.57 | 52.43 | 41.86   | 55.66 | 38.00 | 92.60                                   | 100.09 | 70.67 |
| SI   | 22.34   | 23.98 | 32.74 | 21.29   | 23.29 | 35.22 | 24.99                                   | 25.67  | 26.76 |
| SK   | 30.61   | 37.54 | 28.56 | 21.92   | 32.80 | 26.72 | 44.09                                   | 44.66  | 31.09 |
| MU13 | 9.21  | 10.31 | 9.49  | 8.18  | 12.80 | 13.77 | 10.06                                   | 8.27   | 5.85  |
| EU27 | 10.33   | 10.97 | 8.52  | 10.76   | 13.69 | 13.87 | 10.03                                   | 9.03   | 4.52  |

Source: data processed based on ECB, "EU Banking Structures", October, 2008; <http://www.ecb.int/pub/pub/prud/html/index.en.html> [accessed on 5.03.2009]

The fast increase of banking credits in the East and Central European countries was financed by the significant entries of foreign capital in the banking sectors, stimulated by the high differential of positive interest and by the anticipation of a real appreciation on the long run of the currencies of the respective countries (Isărescu, 2008, p. 250).

Analyzing the dynamics of the banking credits depending on the beneficiaries (non-financial corporations and households), it is found out a faster increase of the credits given to population households in all the surveyed countries, except Bulgaria where the increase of credits given to the corporate sector surpassed, at the 2007 level, the credits given to population households (see the data of table 10).

The significant expansion of credits given to population households points out the large increase of credit demand for houses, consumer credits but also the strategies of the credit institutions acquiring new market quotas by attractiveness and diversity of credit offers. Such an evolution was determined by interest rate reduction, the increase of population incomes, need of improving the endowment degree of the houses and consumer durables, as well as significant orientation of the credit institutions to finance the population households and competition increase between banks on the retail segment.

The dynamics of banking credits given to population households are significantly sustained by the house credits that, in some countries, especially in Romania, Bulgaria and Poland, at the 2007 level, recorded a more important increase compared to consumer credits (see the data of table 11).

**Table 11: Evolution of structure the loans granted to households (according to destination) by the credit institutions in the period 2005-2007 (in %)**

|       | 2005                       |                           |             | 2006                       |                           |             | 2007                       |                           |             |
|-------|----------------------------|---------------------------|-------------|----------------------------|---------------------------|-------------|----------------------------|---------------------------|-------------|
|       | Loans for housing purchase | Loans for consumer credit | other loans | Loans for housing purchase | Loans for consumer credit | other loans | Loans for housing purchase | Loans for consumer credit | other loans |
| BG    | 28.41                      | 60.63                     | 10.96       | 37.83                      | 51.86                     | 10.31       | 40.75                      | 50.67                     | 8.58        |
| CZ    | 67.54                      | 21.43                     | 11.03       | 69.25                      | 20.35                     | 10.40       | 70.89                      | 19.09                     | 10.02       |
| HU    | 59.97                      | 31.66                     | 8.37        | 56.49                      | 36.28                     | 7.23        | 52.95                      | 41.11                     | 5.94        |
| PL    | 35.76                      | 37.64                     | 26.60       | 41.41                      | 32.80                     | 25.79       | 44.96                      | 30.29                     | 24.75       |
| RO    | 13.19                      | 84.55                     | 2.26        | 18.73                      | 79.52                     | 1.75        | 19.87                      | 77.04                     | 3.09        |
| SI    | 31.95                      | 45.96                     | 22.09       | 36.35                      | 42.50                     | 21.15       | 39.14                      | 40.21                     | 20.65       |
| SK    | 65.66                      | 13.67                     | 20.67       | 65.93                      | 15.08                     | 18.99       | 67.06                      | 13.65                     | 19.29       |
| MU 13 | 69.52                      | 13.26                     | 17.22       | 70.76                      | 12.96                     | 16.28       | 71.48                      | 12.85                     | 15.67       |
| UE 27 | 71.94                      | 13.70                     | 14.36       | 72.83                      | 13.37                     | 13.80       | 73.04                      | 13.31                     | 13.65       |

Source: data processed based on ECB, "EU Banking Structures", October, 2008; <http://www.ecb.int/pub/pub/prud/html/index.en.html> [accessed on 5.03.2009]

The structure analysis on destinations of credits given to population households (see the data of table 12) illustrates the existence of some discrepancies between the countries. In this respect, it is worth mentioning the situation of Romania, where, at the 2007 level, although house credits recorded the most important increase, they hold a more reduced share, the consumer credits are prevailing. Comparatively, in EU27 and Euro zone, the situation is reversed where the mortgage credits hold a share of over 70%. Such a difference shows

the low purchasing power of Romanian population and its prevailing orientation to consumption and the low degree of endowment with consumer durable (National Bank of Romania, 2006, p. 40). Consequently, the banking crediting of Romanian population should align to European standards regarding the relation between house credits and consumer credits.

**Table 12: Evolution of structure the loans granted to households (according to destination) by the credit institutions in the period 2005-2007 (in %)**

|       | 2005                       |                           |             | 2006                       |                           |             | 2007                       |                           |             |
|-------|----------------------------|---------------------------|-------------|----------------------------|---------------------------|-------------|----------------------------|---------------------------|-------------|
|       | Loans for housing purchase | Loans for consumer credit | Other loans | Loans for housing purchase | Loans for consumer credit | Other loans | Loans for housing purchase | Loans for consumer credit | other loans |
| BG    | 28.41                      | 60.63                     | 10.96       | 37.83                      | 51.86                     | 10.31       | 40.75                      | 50.67                     | 8.58        |
| CZ    | 67.54                      | 21.43                     | 11.03       | 69.25                      | 20.35                     | 10.40       | 70.89                      | 19.09                     | 10.02       |
| HU    | 59.97                      | 31.66                     | 8.37        | 56.49                      | 36.28                     | 7.23        | 52.95                      | 41.11                     | 5.94        |
| PL    | 35.76                      | 37.64                     | 26.60       | 41.41                      | 32.80                     | 25.79       | 44.96                      | 30.29                     | 24.75       |
| RO    | 13.19                      | 84.55                     | 2.26        | 18.73                      | 79.52                     | 1.75        | 19.87                      | 77.04                     | 3.09        |
| SI    | 31.95                      | 45.96                     | 22.09       | 36.35                      | 42.50                     | 21.15       | 39.14                      | 40.21                     | 20.65       |
| SK    | 65.66                      | 13.67                     | 20.67       | 65.93                      | 15.08                     | 18.99       | 67.06                      | 13.65                     | 19.29       |
| MU 13 | 69.52                      | 13.26                     | 17.22       | 70.76                      | 12.96                     | 16.28       | 71.48                      | 12.85                     | 15.67       |
| UE 27 | 71.94                      | 13.70                     | 14.36       | 72.83                      | 13.37                     | 13.80       | 73.04                      | 13.31                     | 13.65       |

Source: data processed based on ECB, "EU Banking Structures", October, 2008; <http://www.ecb.int/pub/pub/prud/html/index.en.html> [accessed on 5.03.2009]

The extremely fast increase of credits given to population households and, within them, mainly of the ones expressed in foreign currency (stimulated by the lower interest rates compared to the ones related to loans in national currency and by the appreciation of national currencies), has determined significant increase of the domestic demand, pressure on inflation and increase, at high levels, even at alarming levels, of current account deficits, mainly in Bulgaria and Romania (see the data of table 13). In this context, the monetary authorities, being concerned by providing price stability, including provision of financial stability, adopted a set of measures in order to slow down the credits given to the population, mainly the foreign currency credits and mortgage credits. Within the measures adopted by the monetary authorities in various countries, mainly in Bulgaria and Romania, there are included both handling of indirect tools of monetary policy (especially, minimum banking reserve requirements, interest rate of monetary policy) and also measure of management nature, such as introducing some credit limits and limits to loans expressed in foreign currencies.

**Table 13: Evolution of current account balance and the loans in foreign currency in the period 2004-2008**

| Country | 2004 |      | 2005  |      | 2006  |      | 2007  |      | 2008  |      |
|---------|------|------|-------|------|-------|------|-------|------|-------|------|
|         | (1)  | (2)  | (1)   | (2)  | (1)   | (2)  | (1)   | (2)  | (1)*  | (2)  |
| BG      | -6.8 | 48.2 | -12.5 | 47.8 | -17.9 | 45.7 | -21.7 | 62.2 | -18.0 | 66.9 |
| CZ      | -5.2 | 12.8 | -1.6  | 13.1 | -3.2  | 13.6 | -2.6  | 13.0 | -2.9  | 13.9 |
| HU      | -8.6 | 31.1 | -7.6  | 38.6 | -7.5  | 43.6 | -6.4  | 52.4 | -5.9  | 65.7 |
| PL      | -4.0 | 23.9 | -1.2  | 25.8 | -2.7  | 27.1 | -4.1  | 24.4 | -5.2  | 32.6 |
| RO      | -8.4 | 52.3 | -10.2 | 47.8 | -11.8 | 47.3 | -14.4 | 54.3 | -14.0 | 55.5 |
| SI      | -7.8 | 31.0 | -8.5  | 43.3 | -7.0  | 55.4 | -5.5  | 9.6  | -6.0  | ...  |
| SK      | -2.7 | 22.4 | -1.7  | 25.0 | -2.6  | 22.0 | -4.2  | 23.6 | -5.0  | ...  |

\* projection

- (1)- current account balance in per cent of GDP  
 (2)- loans in foreign currency in % total loans

Source: <http://www.ebrd.com/country/sector/econo/stats>; Raiffeisen Research, "CEE Banking Sector Report", 2008, [www.rzb.at/eBusiness](http://www.rzb.at/eBusiness); IMF, "Global Financial Stability Report", April, 2009, <http://www.imf.org/external/index.htm> [accessed on 20.04.2009]

The significant progresses recorded by the banking sectors of the countries under survey, following privatization and entries of foreign banks, can also be highlighted also in the light of the deposit share in GDP and by the relation between credits and deposits (see the data of table 14). The increase of the share of the deposits attracted by credit institutions in GDP points out, especially the confidence increase in the banking sector and the increase of income levels. Among the surveyed countries, we find out that Slovenia has the most important deposit basis and at the opposite side there is Romania, where the credit institutions were interested to acquire less expensive financing resources from the foreign markets. Regarding the relation credits/deposits, the progresses recorded by some countries point out the significant expansion of the credit but also mutation at the balance level of credit institutions, such as their significant orientation to the real economy, the increase of foreign financings as a consequence of lower interest rates.

**Table 14: Evolution of deposit share in GDP and credits/deposits relation in the period 2004-2008**

|    | 2003 |       | 2004 |       | 2005 |       | 2006  |       | 2007  |       | 2008 |
|----|------|-------|------|-------|------|-------|-------|-------|-------|-------|------|
|    | (1)  | (2)   | (1)  | (2)   | (1)  | (2)   | (1)   | (2)   | (1)   | (2)   |      |
| BG | 39.3 | 66.3  | 50.3 | 68.3  | 59.4 | 69.8  | 67.2  | 66.6  | 68.7  | 97.7  | 128  |
| CZ | 34.9 | 59.7  | 33.9 | 59.8  | 33.8 | 59.8  | 33.7  | 69.8  | 33.5  | 75.3  | 77   |
| HU | 38.1 | 95.9  | 38.0 | 104.0 | 39.6 | 111.8 | 41.0  | 118.6 | 41.6  | 128.5 | 145  |
| PL | 34.5 | 124.9 | 33.0 | 126.4 | 33.7 | 123.8 | 35.5  | 123.8 | 35.9  | 96.3  | 108  |
| RO | 20.4 | 75.2  | 23.1 | 72.1  | 26.0 | 80.0  | 28.0  | 95.8  | 31.9  | 114.8 | 129  |
| SI | 56.6 | 76.4  | 56.4 | 86.3  | 86.4 | 64.8  | 100.8 | 67.0  | 107.9 | 77.5  | 163  |
| SK | 65.2 | 50.5  | 62.0 | 53.2  | 55.8 | 67.1  | 55.8  | 72.2  | 58.4  | 76.4  | 81   |

(1)- deposits in % of GDP

(2)- loans in % of total deposits

Source: Raiffeisen Research, "CEE Banking Sector Report", 2008, [www.rzb.at/eBusiness](http://www.rzb.at/eBusiness); National Bank of Hungary, "Report on Financial Stability", April 2009, [http://english.mnb.hu/engine.aspx?page=mnben\\_stability](http://english.mnb.hu/engine.aspx?page=mnben_stability) [accessed on 20.04.2009]

In the context of significant mutations recorded in East and Central European countries at the level of financial intermediation, naturally a question arises: at what level are placed the banking performances and, generally, the indexes of financial stability? The answer to this question can be given based on the index analysis of tables 15<sup>1</sup> and 15<sup>2</sup>.

**Table 15<sup>1</sup>: Comparative situation of profitability and efficiency of the banking sector in the period 2005-2008(%)**

| Country | 2005 |     | 2006 |     | 2007 |     | 2008* |     |
|---------|------|-----|------|-----|------|-----|-------|-----|
|         | ROE  | ROA | ROE  | ROA | ROE  | ROA | ROE   | ROA |
| BG      | 21.4 | 2.0 | 25.0 | 2.2 | 24.8 | 2.4 | 23.1  | 2.1 |
| CZ      | 25.2 | 1.4 | 22.5 | 1.2 | 24.4 | 1.3 | 23.7  | 1.3 |
| HU      | 24.7 | 2.0 | 24.0 | 1.8 | 18.1 | 1.4 | 17.7  | 1.5 |
| PL      | 20.6 | 1.6 | 22.5 | 1.7 | 22.4 | 1.7 | 22.2  | 1.7 |
| RO      | 15,2 | 1.9 | 11,7 | 1.5 | 11,4 | 1.3 | 18.11 | 1.4 |
| SI      | 13.8 | 1.0 | 15.1 | 1.3 | 16.3 | 1.4 | 13.7  | 1.1 |

|    |      |     |      |     |      |     |      |     |
|----|------|-----|------|-----|------|-----|------|-----|
| SK | 16.9 | 1.2 | 16.6 | 1.3 | 16.6 | 1.1 | 13.9 | 0.9 |
|----|------|-----|------|-----|------|-----|------|-----|

\*BG-December; CZ-September; HU-December; PL-September; RO- December; SI-September; SK-September

Source: IMF, "Global Financial Stability Report", April, 2009, <http://www.imf.org/external/index.htm>; Monthly Bulletin of the National Bank of Romania no: 12/2008; <http://www.bnr.ro/Statistics> [accessed on 20.04.2009]

In the context of the restructuration and privatisation process, of the significant expansion of credit and competitiveness enhancement, the bank sectors of the Central and Eastern European countries improved profitability and efficiency. Although interest margins decreased as competition increased, banks witnessed a rise in income as the volume of operations boomed and the range of bank products and services diversified. In 2008, the bank sectors of most countries witnessed a deterioration of the profitability and efficiency ratios in the condition of the considerable reduction of the volume of operations in this period of international crisis.

From the viewpoint of financial stability, an important part is played by the ratio "capital adequacy", that although in certain countries had a descending trend is still in all countries above the minimal level provided by European and international regulations (8%).

**Table 15<sup>2</sup>: Comparative situation of profitability and efficiency of the banking sector in the period 2005- 2008 (%)**

| Country | 2005 |      | 2006 |     | 2007 |     | 2008* |     |
|---------|------|------|------|-----|------|-----|-------|-----|
|         | (1)  | (2)  | (1)  | (2) | (1)  | (2) | (1)   | (2) |
| BG      | 15.3 | 2.2  | 14.5 | 2.2 | 13.9 | 2.1 | 14.9  | 2.4 |
| CZ      | 11.9 | 4.3  | 11.5 | 3.6 | 11.5 | 2.7 | 12.9  | 3.1 |
| HU      | 11.6 | 2.5  | 11.0 | 2.5 | 10.4 | 2.5 | 11.1  | 2.9 |
| PL      | 14.5 | 11.0 | 13.2 | 7.4 | 12.1 | 5.2 | 11.9  | 4.4 |
| RO      | 21.1 | 8.3  | 18.1 | 7.9 | 12.7 | 9.7 | 11.9  | 9.8 |
| SI      | 10.6 | 2.5  | 11.1 | 2.5 | 11.2 | 1.8 | 11.2  | 1.6 |
| SK      | 14.8 | 5.0  | 13.0 | 3.7 | 12.4 | 2.5 | 11.3  | 2.9 |

\*BG-December; CZ-September; HU-December; PL-September; RO- September end June; SI-June ; SK-September

(1)-Capital adequacy in % of risk-weighted assets

(2)-Nonperforming loans in % of total loans

Source: IMF, "Global Financial Stability Report", April, 2009, <http://www.imf.org/external/index.htm> [accessed on 20.04.2009]

## Conclusions

The bank sectors of Central and Eastern European countries passed through significant qualitative transformations in the past decade, being dominated by private banks, respectively by foreign banks, which brought numerous advantages for internal bank markets and new challenges for the monetary authorities.

A significant index for the progresses made by the bank sectors of Central and Eastern European countries is the increase of the financial mediation degree that shows the significant orientation of the credit institutions to the real economy. The rapid increase of the bank credit volume, especially in Bulgaria and Romania was determined mainly by the improvement of the macroeconomic conditions, by the intensification of competition on the bank market further to the input of foreign capitals and liquidity excess in the banking sector.

The current international financial crisis that led to a strong economic recession, makes the bank sectors to face new problems, such as the credit downsizing, the rise in financing costs and the deterioration of the performance and efficiency indicators. In this context, banks are interested to search for new solutions to relaunch the volume of operations and to enhance the efficiency. It is certain that their development will be tightly connected to the real economy.

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