

## **PROFITABILITY OF THE CEE BANKING SYSTEMS DURING THE CRISIS PERIOD**

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**ABSTRACT:** *The increase of the foreign property in the CEE countries took place at the same time with the increase of the concentration on the banking market. The foreign countries contributed to the highest concentration level of the banking market through two channels: the acquisition by the foreign banks of some local institutions and the consolidation of the local (autochthonous) institutions. Plus, the capital markets have developed considerably in the CEE countries, offering the firms alternative financing sources.*

**KEY WORDS:** *foreign banks; profitability; banking sectors; CEE countries; financial crisis.*

**JEL CLASSIFICATION:** *G01; G24; G34.*

### **1. INTRODUCTION**

In the past decades, most countries in Central and Eastern Europe have adopted structural reforms in view of increasing the size, stability and efficiency of financial systems. The opening towards the outside and the internal structural reforms of the financial sector are supporting the development of a competitive and efficient financial system. Some authors such as Berger and Humphrey (1997), Kumbhakar et al. (2001), Isik and Hassan (2003), and Brisimis et al. (2008), show that the financial deregulation has a positive impact on the performance of banks, while other authors consider that deregulation has a negative impact, determining a decrease of allocative efficiency (Wheelock & Wilson, 1999) or considering that financial liberalization most often leads to financial crises (Betty & Jones, 2007).

In view of reducing systemic risks, at the level of these states bank, supervision was more strictly regulated with the purpose of restoring the faith into the bank sector (Berglof & Bolton, 2002). The financial liberalization process had as

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purpose the increase of the competition level, the effectiveness of the financial intermediation process and the increase of financial stability (Bonin & Wachtel, 2003; De Haas & Van Lelyveld, 2006).

In the case of developing countries, studies focus on the investigation of the impact of deregulation, of the privatizations of the state banks, of entering foreign banks and their effects on banks performance (Asaftei & Kumbhakar, 2008; Koutsomanoli Filippaki et al., 2009; Yildirim & Philippatos, 2007; Pasiouras et al., 2009).

The studies in the field performed at the level of the countries in Central and Eastern Europe have showed that the structural reforms at the level of banking systems have determined the improvement of the efficiency of financial intermediation. Fries et al. (2005) have showed, based on an analysis of the performance of a group of 289 banks from 15 states in transition during 1995 to 2004, that financial liberalization, seen in the form of the privatization of banks and of the entry of foreign banks, has as result, the decrease of bank costs and the increase of the financial services' market.

Fang et al. (2011) find that the progress in banking regulatory reforms, privatization and enterprise corporate governance restructuring has a positive impact on bank efficiency. The presence of foreign banks can be beneficial for consumers by offering superior products and services, for the financial industry by increasing the quality of services and for economy by increasing efficiency (Yildirim & Philippatos, 2007). Nevertheless, the entry of foreign banks is not without its risks, especially in the case where this entry is performed without a previous consolidation of the institutional frame. Claessens et al. (1998) have shown that the presence of foreign banks can facilitate the increase of competition, the improvement of the allocation of loans and access to international capital markets. But there are, also, the costs associated to the entry of foreign banks, costs that can consist of the increase of the systemic risk caused by the increase of competition and the inclination towards risk of the banks in order to maintain or to increase their market share (Hellmann et al., 2000).

Claessens et al. (1998) examine the effects of the entry of foreign banks on the national bank sectors. The authors show that in the developing countries, there are registered higher profitableness rates and interest margins compared to the local banks, and in the developed countries, the situation is opposite. Another conclusion is the fact that the profitableness and general administration expenses of the local banks decrease after the entry of foreign banks.

Demirguc-Kunt & Huizinga (1999) present similar results. They show that foreign banks generally have higher profit margins than the local banks in the developing countries. Other studies show that the entry of foreign banks reduces operational costs and the profitableness of local banks, reduces the risk of the occurrence of a bank crisis and leads to a higher economic growth by improving the efficiency of local banks.

Andries & Asandului (2010) analyze the impact of financial liberalization on banking performances, highlighting the determination of the impact of the presence of foreign banks on the performance of the Romanian banking system. The analysis reveals the fact that the liberalization and internationalization of the banking system had as effect the increase of competition which determined domestic banks: to reduce

their operational costs concomitantly with investing some important amounts into new technologies; to increase their credit portfolio in relative terms by reducing other assets and increasing the client base, which led to the increase of the credit risk and to the increase of the bank provisions; to diminish their net interest margin by decreasing the interest rate for loans, concomitantly with increasing the interest rate for deposits.

Agenor (2001) highlights the fact that because foreign investors are not familiarized with the problems specific to the countries they invest in, they tend to withdraw immediately and massively when encountering the first difficulty. This can lead to a profound crisis on the internal financial markets. Studies such as Claessens & Glaessner (1998) show that the restrictions imposed in Asia have led to a slower institutional development and costlier services. The level of liberalization of the capital account can affect the internationalization benefits and costs. Also, they highlight the fact that a certain level of mobility of the capital is necessary for the efficient internationalization of banks.

Johnston (1998) has investigated the relationship between the financial sector's reform and the liberalization of the capital account. The author shows that, before the liberalization of the capital accounts, the financial intermediaries must reach a level of development that guaranteed the efficient use of the capital. The countries with poorly developed financial systems need time in order to develop their financial institutions and markets, especially the bank sector, before the liberalization of the capital account.

Andries & Cocris (2010) analyze the efficiency of the main banks in Romania, Czech Republic and Hungary for the period 2000 to 2006 by using the frontier analysis and the results of the analysis show that the banks from Eastern European countries register low levels of technical efficiency and cost efficiency, especially the ones in Romania, and that the main factors influencing the level of efficiency of banks in these state are: quality of assets; bank size, annual inflation rate; banking reform and interest rate liberalization level and ownership form.

## **2. ARE THE FOREIGN BANKS MORE PROFITABLE THAN THE AUTOCHTHONOUS BANKS?**

Most of the studies referring to the profitability of the bank focus on the markets with a low presence of the foreign banks. Plus, these studies ignore the fact that the foreign banks can be differently affected by certain factors in comparison to the autochthonous banks, and also other supplemental factors, such as the conditions in the origin country and the strategies of the mother/institutions. The unique study which deals with this problem is that of Williams (2003a, 2003b), which elaborate an empirical model of the determinant factors of the profit of the foreign banks and test a series of hypotheses linked to the profitability of the foreign banks in Australia. The results show that the internal factors do not bring a plus of descriptive force top the model, even if they offer important information on the decisions of politics and strategy of the foreign banks. From the theoretical point of view, the profits of the foreign banks can be influenced by the business environment from the origin countries, and also by the solidity and the strategy of the mother-institutions. These can involve

both costs, and also earnings for the banking sectors form the Central and East Europe countries.

The most important advantage of the foreign property is the lower sensitivity of the foreign banks to the conditions from the host-country and the much better access on the international markets. The experience internationally indicates the fact that the mother-banks become last resort creditor of the branches at difficulty. For instance, the Belgian bank KBC recapitalized its Polish branch Kredyt Bank and the Hungarian one K&H, when the latter had problems. As for the Kredyt Bank the problems were generated by the rapid increase of the volume of credits, which had as consequence the increase of the non-performing credits, while the problems for the K&H were caused by the fraud administration (Opritescu & Manta, 2008).

At the same time, the activity of the foreign banks can be influenced negatively by the weak results of by the modification of the strategy of the mother-banks. There are two main channels that must be taken into consideration. The first, a foreign bank can be liquidated if the mother-bank has difficulties and decides to close some of its branches. An example of the impact of the problems of the mother-bank on the foreign banks which operate in the CEE countries is the withdrawal of Dresdner Bank from Romania and Czech Republic. The second channel, the management of the international banks approves the allocation of capital with the highest expected profit (de Haas & Naaborg, 2005a & 2005b). Thus, even the profitable foreign branches can be closed in order to reallocate capital to a project even more profitable in another country.

The impact of the conditions from the origin country on the foreign countries is more ambiguous and cannot be easily predicted. For instance, if the economical evolution presents an ascendant tendency in the origin country, the mother-banks can have many profitable opportunities in the country and can thus decide to allocate less capital to the branches. At the same time, a powerful economical increase in the origin country makes the mother-banks more profitable and more capable to develop the network of branches abroad.

Taking into consideration the fact that the foreign banks are often accused of offering services only to the great firms, we should assume that the profits of the foreign banks decrease at the same time with the development of the capital markets.

A study made by National Bank of Finland analyses determinant factors of the profitability of the banks, using a set of data containing 265 banks from 10 CEE countries (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia). There are analyzed determinant factors of the profitability of the banks with different property regime, estimating the regressions for the entire sample and separately for autochthonous banks, foreign property, branches of banks created by undertaking and newly created branches of the foreign banks.

The results of a study (Opritescu & Manta, 2008) show that there are differences in the reaction of the foreign and the autochthonous banks. The autochthonous banks register greater profits on markets with higher concentration degree. As for the influence of the evolution of the capital market on the profits of the foreign and the autochthonous banks, we can say that the capital markets have a complementary function or of substitution for the banking sector. On the other hand, as

the capital markets develop themselves, the banks can obtain more information about the clients, which facilitates the selection and monitoring of the latter.

As a conclusion, the profits of the foreign banks are not affected by the concentration level on the banking market while the autochthonous banks make greater profits by operating on such markets. This is due to the low rates practiced in order to attract new clients and to obtain the desired market quota.

### **3. PROFITABILITY OF SOME CEE BANKING SYSTEMS DURING THE CRISIS PERIOD**

The efficiency and profitableness of banks constitutes a very important element in the analysis of financial systems, especially of the developing countries, at the level of which the banking system represents the main component of the financial system and which has known in the past years, major mutations at the level of the structure of shareholding as a result of privatization, of the entry of foreign banks and of the increase of competition determined by the liberalization of the market and legislative changes (Opritescu & Manta, 2008).

The results of the performed analysis in CEE countries show us that, for the analyzed period, both the financial reform index, and the index regarding bank reform have a positive impact on the bank performance indexes (cost of intermediation, operational performance and return on assets). This means that an increase at the level of the indexes regarding financial reform and bank reform determines an increase of the performance of banks in Central and Eastern Europe.

Analysis results achieved are very important in terms of banks management and governmental authority's perspectives. Thus, banks need to improve the performance and quality of assets owned by improving the lending process and reducing the share of nonperforming loans. Also, banks need to reduce its financial costs. A topic of interest in the current context of international economic and financial crisis is the optimal size of banks.

The analysis results in an increase in bank size, gauged by the total assets held, and a decrease in banking performance, but an increase of the equity level and an improvement of capital adequacy will foster the banking performance. To facilitate increase in the level of banking performance, governmental authorities must accelerate the process of liberalization and reform of the banking system and make every effort to ensure a low inflation rate.

The Romanian banking system's accession to the European Union on January 1st, 2007, was a significant moment in the banking history and it emphasized the significant progress in the legal, structural and operational fields that reduced the gaps between Romania and the EU Member States.

The changes made in the Romanian banking system may be highlighted using a composite index calculated by the European Bank for Reconstruction and Development (EBRD) for the assessment of bank reforms and of interest rate relaxation. The following are taken into consideration when determining this index: the quality of regulation and monitoring activities, the type of property and the access of private sector to funding.

The values of this index range between 1 and 4+ with the following meaning: 1 represents low progress of the transitional process and 4+ reflects full compliance with the standards and performances of developed economies.

This transition of the Romanian banking system emphasized by the EBRD index is facilitated by the data presented in Table 1. With regard to the Romanian banking system, the values of the transition index calculated by BERD show that there is still room for improvements, despite the progress of reforms. The low score of Romania (3.3% in 2008 compared to 3.67% of Bulgaria and Poland) is due to its slower reforms.

**Table 1. Assessment of the banking system's reform based on the EBRD index, in some countries in Central and Eastern Europe in the period 1990 – 2008**

Countries	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	4,0
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

Source: [www.ebrd.com/country/sector/econo/stats/tic.xls](http://www.ebrd.com/country/sector/econo/stats/tic.xls)

The accumulation of the economic disequilibria, the deterioration of the flexibility of the banks as a consequence of the limited volume of drawn deposits and the high dependence degree in report to the capital of the mother-banks are the factors that the analysts of the rating agency see as dangerous for the autochthonous banking system.

Still, the rating agency appreciates that the regulations of the National Bank of Romania offered a better mechanism of administration of some eventual major risks for the banking system.

The financial crisis at the end of the past decade clearly disclosed the vulnerability of highly interconnected financial systems in times of recession. Financial problems and failures on the US financial market in the fall 2008 almost immediately contaminated financial systems and institutions worldwide.

Studies were made between banks in different regions in the EU as well as between different types of banks in order to explore whether there are differences in the financial performance and risk-taking of the banks with respect to their geographical operations area (nationality) and association form.

According to the new model of financial risk realized by The Banker magazine, banking systems in countries like Moldova, Chile, Peru and Bolivia are less susceptible to be affected by the current financial crisis than countries like United States, United Kingdom or Japan. The most developed countries, but also the most dependent on credit, have suddenly become the most exposed to the crisis. The poorer countries are less dependent on credit, they have just a fraction of the leverage on the developed markets and they are more financially isolated than other countries (Turkes, 2010).

There are numerous of studies aiming at exploring, examining and explaining the profitability of banks. Bank profitability and performance is then mainly related to: i) whether or not there are economies of scale and scope in banking, ii) whether mergers and acquisitions create or destroy value on the whole as well as partially, iii) the efficacy of management (X-efficiency), and iv) the impact of market structure (Berger & Humphrey, 1994). Particular interest is then paid to the financial performance of European banks (Molyneux & Thornton, 1992; Altunbas et al., 2003; Bos & Schmiedel, 2007). However, over the past decades there is also a growing interest in the profitability and risk-taking of banks in emerging markets (Said & Tumin, 2011 for a recent focused study and Olson & Zoubi, 2011 for a broader survey). Along with the globalisation of financial markets more and more interest is being put on understanding the impact and importance of international divergences (Berger, 2007) and interactions (Claessens, Demirgüç-Kunt & Huizinga, 2001; Carbó et al., 2009; Hannan & Prager, 2009). For instance, Hannan & Prager (2009) observe that the profitability of banks in less competitive local markets is positively affected when more diversified banks enter into the market. One explanation may be that the geographically diversified bank does not adopt the prices on the local market.

The banks' return on equity (ROE) may be regarded as the core measure of the overall bank profitability in accounting based studies (Frazer & Zhang, 2009). Generally the bank's ROE is first broken down into return on assets (ROA) and an equity multiplier.

The recent study by Lindblom et al (2011) of Swedish banks' returns and risk-taking during the financial crisis demonstrates both advantages and short-comings of this kind of analysis. As expected the analysis shows that the overall profitability of EU banks, in terms of return on equity (ROE), was clearly affected by the financial crisis. The crisis did also affect banks in different regions, but the regional effects seem to differ both with respect to timing and strength. Already in 2008 many banks seem to have suffered severely, particularly in the West European region. Banks in Eastern Europe appear to be better off on average, but these banks were facing a significant decrease in their overall profitability in 2009. Still these banks were on average displaying a higher return in nominal terms than the average EU bank (Lindblom, Olsson & Willeson, 2011).

According to the analysis with respect to association form, in general savings banks appear to have managed the crisis better than commercial banks. These banks seem not to have been as exposed to interest rate risk and credit risk as commercial banks. This was particularly clear in West Europe, where the average commercial bank suffered from losses in 2008. An unexpected finding, when comparing risk exposures of savings banks and commercial banks, is that savings banks seem to be as exposed to capital risk as commercial banks - at least in terms of leverage. This is unexpected as savings banks are supposed to be more conservative and less risk-taking than commercial banks. In addition to these general conclusions, the analysis lends support to the following preliminary conclusions (Lindblom, Olsson & Willeson, 2011):

- The reason for the banks' decreasing overall profitability in 2008 is not only due to credit losses. Even before loan loss provisions, the average returns on the asset side fell on the EU level and, particularly, in West Europe.

- At the beginning of the crisis the average bank experienced losses from a too high exposure to liquidity risk. Following the increase in market rates, the banks' average interest cost rose considerably in 2008. However, in 2009 both market rates and the average interest cost of the banks declined, which is most likely explained by the intervening actions of governments and central banks.
- The analysis implies that the average bank was exposed to high interest rate risk before the crisis. To some extent these losses are caused by credit risk exposure, but the sharp decrease of the banks' average leverage spread also before credit losses suggests that the banks did not suffer from credit losses only.
- The capital risk exposure of the average bank seems to have been affected only marginally by the financial crisis and was in that respect not a major source for their changing profitability.
- The banks' decreasing return on financial leverage is to a certain extent an indirect effect caused by their exposures to operational risks. The analysis discloses a considerable decrease in the average bank's contribution from non-interest bearing business activities, like trading and other financial services, in 2008. However, the income from these activities was improved already in 2009.

In the Romanian banking system, the assessments for the end of the year 2007 indicate a revival of the growth rate of the aggregate profit compared to that recorded in recent years, due to some higher performances achieved especially by the important credit institutions. In this situation, some credit institutions were forced to reorganize their activities, while others had to continue the process of rapid expansion of the regional networks. The rates of profit (ROA and ROE) continued their slightly downward trend, although the evolution of the operational efficiency was positive in 2007, against the background of increased attention from the credit institutions concerning the judicious management of the operational costs. Therefore, one cannot exclude the hypothesis of a stronger negative impact on the profitability of the credit institutions, most likely caused by the increased related interbank funding costs, against the background of the ongoing international financial turmoil.

The improved presence in the territory and the banks' new rules for lending have boosted the mediation development of banks, the credit institutions continuing their counterbalance strategy to decrease the interest margins by diversifying the income sources and by larger takings from increased volume of loans, especially from the currency component. However, the banks' profit distribution was heterogeneous, the high values, both in absolute and relative terms, being recorded mainly at the level of large credit institutions. At the same time, some medium and small banks have ended the year 2007 with a loss.

The return on equity (ROE) has recorded a level slightly below than that of 2006, under the conditions of a net profit dynamics comparable to that of the equity. The ROE analysis based on decisive factors reveals a slight deterioration of bank capital remuneration as a result of the diminished capacity of assets to generate profit, when the increased leverage effect has partially counterbalanced the reduction recorded at the rate of return on assets (ROA).

The massive investments, targeted especially towards the expansion of banking network and increased competition resulted in a decrease of the profit share in



operating income in 2007. However, this process did not affect the ability of assets to generate income. The value of the asset utilization ratio has slightly increased. Under these conditions, the rate of return on assets (ROA) has continued in 2007 its decreasing dynamics, but at a slower pace than the previous years, therefore its size remains comparable to the values reported in other European countries (Table 2.).

The structural analysis of the operating income highlights the diversification of the banks' earnings sources. The net income derived from foreign exchange transactions has represented the most dynamic component of the operating income, due to highly volatile currency market. At the same time, the income derived from the commissions maintained its value, increasing at a rate similar to that of the operating income. The net interest income decreased its share in operating income. The substantial increase of interest expenses, compared to the same period last year, is mainly caused by the rises in interest rates paid for deposits. However, the impact on net interest income was different from one bank to another, the most affected credit institutions being those that lacked a proper basis for deposits derived from non-bank customers compared to the granted loans portfolio. The recent turbulence in international financial markets has further accrued the increasing amount of interest expenses by enhancing the interest rates associated to interbank resources.

In the structure of operating expenses, the staff costs continue to be the main component, against the background of the increasing number of bank officials. The provision expenses increased in 2007 primarily as a result of non-governmental credit expansion, but also due to legislative changes. By maintaining the strict levels of profitability targets set by shareholders, the more intense competition on the Romanian banking market represents the pressure factors on credit institutions in finding the appropriate solutions to further continue the positive dynamics of banking efficiency.

The profitability of the Romanian banking system has turned negative since May 2010. Thus, for the first time since 1999 the banking system ended the year with a loss, mainly under the influence of the high provisioning costs, and of the deterioration of the exploitation result. However, the loss was not a generalized characteristic. In the case of the main indicators of profitability (ROE and ROA), descending tendency continued in 2010 for the second consecutive year. In mid-2011, the ROE and ROA levels had already slightly improved compared to the same period last year, becoming thus positive (Table 2.).

Also in 2011, the loss was not a generalized feature, being mainly characteristic for the medium and small banks. In mid-2011 the banking system has recorded positive results, the operating profit, although reduced compared to the same period last year, covering the expenses with the decreasing provisions. It is estimated that the profitability of the banking system will remain low in the short term, given the time lag between the resumption of the economic growth and the manifestation of its favorable effects on the financial results of banks.

The net expenses with the derived provisions of loans granted to non-banks customers have increased in 2010, reflecting the deterioration of the loan portfolio's quality, but the provisions' rate of formation has dropped by the end of the year. Since January 2011, the net provision expenses were below the level recorded in the same period of 2010. The net interest income has kept its growing trend manifested in late

2009, the dynamics turning negative in early 2011. The explanation is that banks have offset the decline in granted loans for private sector by increasing the investment and securities holdings, having a lower yield. In addition, the net interest margin applicable for the non-financial private sector was restrained, mainly due to a lower average interest rate on loans against the background of the intensifying competition and reduced demand for credit. The interests on customer deposits and on those related to funds raised from credit institutions have remained the main components of the interest expense, similarly to previous years.

In 2010, compared to the same period last year, the net commission income has reduced its share in total operating income, due to its more pronounced contraction in the context of disintermediation. Since 2011, the annual dynamics of the two types of income reversed, the decrease rate for net commission income being slower than that of the operating income.

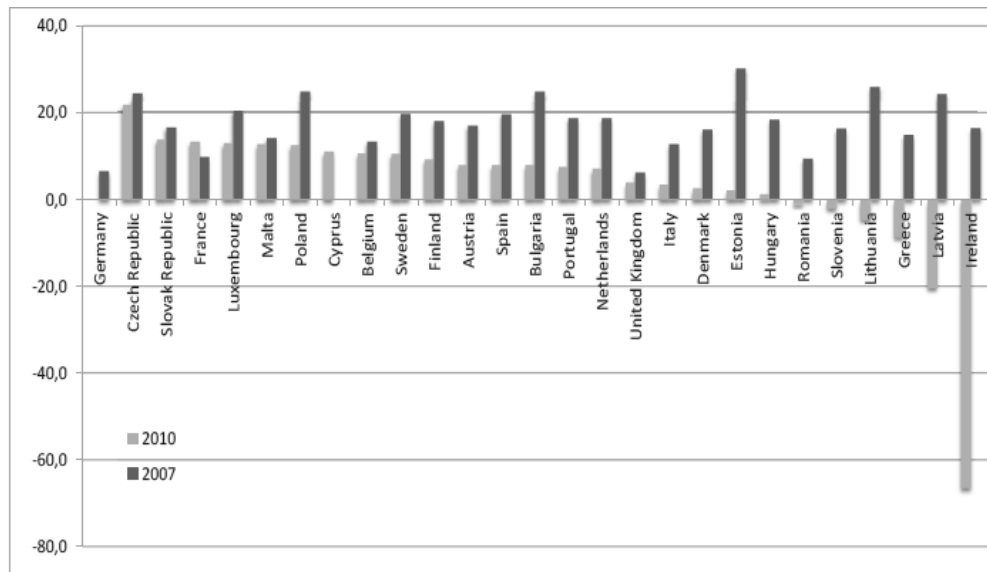
The concern expressed by banks during the year 2010 to limit the operating costs reflected in the dynamics' contraction of the costs related to staff, materials, works and services, provided by third parties and to amortizations, compared to 2009. The downward tendency was preserved in late 2011, although the group related to amortization expenses resumed its upward tendency.

**Table 2. Evolution of ROA and ROE for CEE banking systems (percent)**

Countries	2003		2004		2005		2006		2007	
	ROE	ROA	ROE	ROA	ROE	ROA	ROE	ROA	ROE	ROA
Bulgaria	22,7	2,4	20,6	2,1	22,1	2,1	24,4	2,2	25,4	2,5
Czech Republic	23,8	1,2	23,3	1,3	25,2	1,4	22,5	1,2	23,1	1,3
Poland	5,4	0,5	17,1	1,4	21,9	1,6	21,0	1,7	25,6	1,8
Romania	15,6	2,2	18,5	2,4	15,2	1,9	11,7	1,5	11,4	1,3
Hungary	19,3	1,5	25,3	2,0	24,7	2,0	24,0	1,8	22,9	1,8
Countries	2008		2009		2010		2011			
	ROE	ROA	ROE	ROA	ROE	ROA	ROE	ROA		
Bulgaria	21,0	2,3	9,3	1,1	6,7	0,9	6,1	0,8		
Czech Republic	22,0	1,2	26,0	1,5	20,7	1,4	18,6	1,2		
Poland	20,0	1,5	10,5	0,8	12,4	1,1	15,1	1,3		
Romania	17,5	2,0	4,0	0,5	-2,0	0,1	0,7	0,1		
Hungary	13,0	0,2	12,0	0,1	3,0	0,05	-8,0	-0,1		

Source: IMF, *Global Financial Stability Report, 2008* and national central banks sites

Poland and Romania started the last decade with lower ROE rates (Table 2.). Poland has closed the gap after a few years, while Romania has registered lowest ROE rates in the following years, reaching a negative level in 2010. Bulgaria lost its position and Hungary has reached negative ROE ratio in the last analyzed year, just like Romania, Greece, Slovenia, Latvia and even Ireland (Figure 1.).



**Figure 1. Development of ROE in EU 2010 vs. 2007**

*Source: IMF, Global Financial Stability Report, 2010*

The number of Polish banks reporting negative profitability ratios remained close to the beginning of 2011 level, but the share of these banks in the banking sector's assets considerably decreased until the end of 2011. This resulted from a shift in the composition of the group of banks with negative profitability ratios. In terms of return on assets, discrepancy among commercial banks and branches of credit institutions has narrowed. However, large banks still exhibit higher ROA than the sector's average.

The improvement in the banking sector's earnings and profitability ratios was mainly driven by the stabilization of loan portfolio quality expressed in decreasing value of charges to provisions for impaired loans. The decomposition of changes in ROE of the domestic banking sector shows that in the period under analysis the improvement in ROE was also supported by a slight increase in financial leverage by banks.

In Czech Republic, return on equity in 2011 faced a slight decrease from the level of 2010. The slight annual decline in the net profit of the banking sector in 2011 was due mainly to recognition of the impairment of Greek bonds in some banks. By contrast, profit from fees and commissions, and especially interest profit, increased year on year.

However, the breakdown of the key components of profit from financial activities was broadly unchanged from 2010. Gains and losses from financial market operations are one of the areas that can affect banks' operating profit. Although banks in the Czech Republic tend to focus on the conservative banking model of accepting deposits, providing client loans and investing in domestic government bonds, they are relatively active in the area of currency and interest rate derivatives held for trading.

Insofar as banks use derivative transactions to hedge market risks and recognize them as hedging derivatives in their books, the volatility of their profits decreases. However, hedging derivatives account for only 14% of the notional value of all derivatives, while the rest is recognized as derivatives held for trading, which are revalued to fair value against profit and loss.

In Czech Republic, high operating profits allow banks to create sufficient buffers to cover losses from credit exposures. The operating profit of banks in 2010 continued to offset loan impairment losses sufficiently, thereby ensuring a stable level of net profit. The decline of the net profit in 2010 was due mostly to base effects resulting from extraordinary revenues in 2009, augmented by a modest increase in administrative expenses in 2010. Return on Tier 1 fell by more than 4 percentage points in 2010 compared to 2009.

The conservative banking business model in the Czech Republic brings banks benefits in the form of relatively stable income on financial activities. Banks are able to generate sufficient income in the long run primarily through their portfolio of claims and to make net profits even in years when income on other financial activities declines or risk costs increase. The year 2009 was no exception in this regard. Despite an almost twofold increase in risk costs due to provisioning, profitability did not decline since operating profit gross of losses from impairment of loans and other assets recorded a sizeable increase.

The banking sector ended 2009 with a net profit by around 30% on 2008. However, the increase in profits was affected by numerous one-off operations which influenced the results in both 2008 and 2009. The profit less these one-off transactions recorded in 2009 would be slightly below the 2008 level.

Since leverage (assets expressed as a multiple of equity) in the Czech banking sector has been generally declining over the past decade, the sector's profitability has been driven not by the use of a larger volume of external funds compared to equity, but by a higher profit margin. The value of leverage 12,5% for 2009 is lower than in the banking sectors of some countries where parent banks of the largest Czech banking institutions are active. By contrast, Central European countries (Slovakia, Poland and Hungary) record very similar values of this indicator as the Czech Republic.

In 2009, banks benefited mainly from an increase in the interest margin, even in conditions of declining interbank rates. Despite the reduced economic output, stagnant credit portfolios and declining market interest rates, the main components of profit from financial activities increased in 2009. A more detailed analysis reveals that the increase in net interest income was due mainly to a higher interest margin in the retail segment of client deposits and loans, as net interest income from the administration of securities and other financial operations (repo operations with the CNB) declined.

In Hungary, the banking system has booked losses, mostly due to one-off effects; adjusting for those, the sector is profitable. At the end of 2011, the banking sector reported a pre-tax loss, a significant deterioration from the pre-tax profit in the previous year. After adjusting the 2011 loss for the bank levy and the loss attributable to the early repayment scheme, the banking sector profit in 2010 was similar to that of 2009. The banking sector pre-tax profit dropped significantly in 2010 compared to

2009, and its ROE (return on equity) decreased from 12.5 per cent to 2.8 per cent, indicating an extremely low internal capital accumulation capacity. However, in evaluating these data, consideration should be given to the pivotal role of the bank levy, and the tighter provisioning policy of a bank, which resulted in a loss. Excluding these items, the banking sector pre-tax profit would be nearly identical to the corresponding 2009 data. The banking sector's favorable profitability resulted from increase in net interest income. Interest income increased in conjunction with a decline in business activity, thus actually increasing bank profitability.

With the exception of the Baltic countries, profitability is lower in the domestic banking sector than in the countries of the parent banks and other countries of the region. A comparison of profitability within the region reveals that the Czech Republic, Slovakia and Poland are the leaders in Central Eastern Europe. In contrast, the Baltic countries and Hungary are among the countries with the lowest profitability. If this low profitability remains for a longer period, in addition to banks' weakening ability to accumulate internal capital, Hungarian banks may suffer a competitive disadvantage in the allocation of parent banks' funds and capital. This, in turn, may have an adverse impact on lending capacity, and consequently, on economic growth.

This risk is considerably increased by the upholding of the current level of the bank levy in both 2011 and 2012. Meanwhile, in respect of the fundamental developments, it is a favorable that the Hungarian banking sector's earning capacity on its core business activity is high. Without the bank levy Hungary would be in the leader's group of Europe instead of in its current poor placing.

The number of unprofitable banks, however, is on the rise. The banking sector's annual rolling average of return on assets (ROA) was 0.9 per cent in 2009, while return on equity (ROE) reached 12.7 per cent (based on profit after tax, ROA and ROE stood at 0.8 per cent and 10.9 per cent, respectively). This represents a slight decline compared to 2008. The profitability of the Hungarian banking sector is considered favorable in international comparison. Profit performance has exceeded expectations, which significantly enhances the banking sector's shock-absorbing capacity. At the same time it should be noted that this profit has been generated by a few large banks.

Although the profitability of financial enterprises is still positive, they are expected to face losses in future, which may significantly worsen the consolidated results of the affected banking groups. In 2009, loan loss provisioning increased considerably for financial enterprises as well. At the sector level, this is three times as high in the same period of 2008; moreover, it exceeds the provisions for the entire year of 2008. In addition, profitability was weakened by the fact that the profit on financial transactions fell far short of previous levels. Profit-reducing factors were partly offset by the interest income, which continued to grow at a similar pace as in previous periods, but the weaker exchange rate also played an important role in this achievement. As a result, the profit of financial enterprises shrank to one-third of the value recorded in 2008.

Meanwhile, pre-provisioning profit increased only slightly. As a result of a further rise in credit risk costs, loan loss rate and a substantial contraction in the loan portfolio, the sector's profit may turn negative by the end of the year, deteriorating

banks' domestic group-level consolidated results. The profitability of the domestic banking sector is declining, but it continues to exceed the levels of parent banks' countries. In the two years preceding 2006, the domestic banking sector had a remarkable competitive advantage over the profitability of the banking sectors of some major parent countries. Compared to parent banks' markets, this competitive advantage became narrower in 2006 and 2007, but still remained in place.

In 2008, the ROE indicator of the domestic banking sector moderated further, but the Hungarian banks' advantage in profitability probably continued to exist compared to parent banks' markets. The decline in profitability indicators was caused by increased provisioning, the rise in operating costs exceeding inflation, the stagnation of interest income, fall in income from financial transactions and one-off effects. For the majority of banks the ROE (17 per cent) and the ROA (1.3 per cent) calculated with the pre-tax profit is declining or stagnating.

The state of earnings may be defined as acceptable: the Bulgarian banking system as a whole and most of banks and bank branches managed to generate positive financial results. In other circumstances, these values would be assessed as an indicator of a very good state of the banking system. However, the trends suggest a decreasing capacity for generating additional resources necessary for counteracting the expected negative processes.

Bulgarian banking system profitability in 2011 was determined by factors inherent to the previous reporting periods: • lower interest income on newly extended loans; • limited ability to expand income via alternative financial services. As a result, ROA came to 0.85 per cent against 0.96 per cent a year earlier. ROE also declined to 6.47 per cent, from 7.49 per cent as of 2010).

#### **4. CONCLUSIONS**

In CEE region, Czech Republic, Poland, Latvia, Estonia, Bulgaria and Ukraine had the highest ROE ratio before the crisis has erupted. Regarding ROA development, Bulgaria has the highest ratio almost the entire analyzed period, but lost its top position in 2010-2011. Poland started with the lowest ROA rate, but it ended the period with the highest ROA ratio, together the Czech Republic. The most stable developments are met in Czech Republic that proves it has the strongest banking system in the region, followed by Poland, while Hungary has faced the largest difficulties during the crisis period. Hungary has reached negative levels both for ROA and ROE in 2011. Romanian banking system has also faced losses during the crisis, but in 2008 it has better ROE and ROA levels than Hungary. Romanian banking system weaker performance can also be explained by the low ERBD index score due to its slower reforms, compared to Bulgaria, Poland or, moreover, Czech Republic.

Moody's, the credit rating agency, estimates that the profitability of the Romanian banks will continue to be under pressure, in a context where the level of the cost related to credits is expected to be high, in a still challenging macroeconomic environment. Moody's anticipates that the provisions will continue to significantly cut the operating profits of Romanian banks also and in the future, although many bankers believe that the peak regarding the credit risk cost was achieved last year. The

Romania's banking sector has been under pressure since mid-2008 due to higher funding costs and rising provisions in the context of deteriorating economic conditions.

The performances of the Romanian banking system will be further affected by the difficult macroeconomic outlook. The Romanian banking system has so far proved resistant to the economic shocks, although ratings were down due to diminishing gains and increased credit costs.

According to Moody's, the future will be difficult for the Romanian banks, leading to a high level of provisions for bad loans and to a lower profitability, although concerns about liquidity and capital needs have diminished. However, the systemic risks are reduced by the commitment made by the international banking groups with subsidiaries in Romania to the International Monetary Fund, to further support their subsidiaries and to maintain exposure on the Romanian market.

For the rating agency to change the stable perspective of the Romanian banking system it is required to record a sustained economy, combined with a decrease in unemployment. The negative outlook reflects the difficult economic conditions, and estimates that the nonperforming loans and costs remain high, affecting the banks' profitability.

Also, the tendency of deterioration of the credit quality must be reduced and the banks' profitability straightened, and the earnings should be less affected by the credit costs. Moody's claims that, the level of capitalization of the Romanian banks continues to be good due to the support given by the parent banks.

Lately, Moody's has maintained a negative outlook on all banking systems of the Commonwealth of Independent States (CIS), of the Baltics and of Eastern Europe, reflecting the impact of the financial crisis on the assets quality on revenues, on capitalization and on financing conditions.

Thus, according to the report, that analyzes the evolution of ratings and prospects in 12 countries, Moody's may maintain a negative outlook on the banking systems in Romania, Bulgaria, Ukraine, Hungary, Kazakhstan and the Baltic States, due to the negative pressure on the financial foundation and to the ongoing difficult economic environment in the region. Some countries have shown signs of stabilization. Therefore, the agency claims that the prospect on the banking systems in Poland, Russia, Slovakia and the Czech Republic could be increased from negative to stable in 2012.

Moody's notes that any increased prospects will depend on the sustained improvement of the factors affecting the lending, including the macroeconomic environment, quality of assets, income generation and funding conditions. Given the uncertainties surrounding the macroeconomic environment, the negative credit trends could persist this year in most of the banking systems in emerging European countries.

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