

Banking

ESTONIAN BANKING SYSTEM DEVELOPMENT, 1995-2004

Jaan Vainu

Tallinn University of Technology
School of Economics and Business Administration
Department of Economics
Kopli str. 101
11712 Tallinn
Estonia
e-mail: jvainu@tv.ttu.ee
telephone:+372 620 40 50

Abstract

Banks and other financial institutions are a unique set of business firms whose assets and liabilities, regulatory restrictions, economic functions and operation make them an important subject of research. Banks' performance monitoring, analysis and control deserve special attention in respect to their operation and performance results from the viewpoint of different audiences, such as investors/owners, regulators, customers, and management. This article presents some historical notes on the development of the Estonian banking system and the capital structure of banks. Different versions of financial ratio analysis are applied for bank performance analysis using financial statement items as initial data sources. The use of a modified version of DuPont financial ratio analysis, and using econometric models are discussed. Empirical results of the Estonian commercial banking system performance analysis are also presented.

Keywords: *entrepreneurship, bank performance, DuPont analysis, econometric models*

1. Introduction: Theoretical Background and Overview of Related Literature

Problems concerning the soundness of the banking and financial systems has become more important in all countries over the recent years. The financial sector, and especially the banking system, is vulnerable to systemic crises, which has led to the creation of costly safety nets as depositor insurance schemes with the well-known moral hazard problem. It is argued that there is increasing evidence that banks are “black boxes” due to the weak transparency and banks’ unwillingness to disclose information (Hyytinen and Takalo, 2002 and 2003). To measure banks’ creditworthiness and risk exposures is a complicated issue and it is not easy to interpret banks’ accounting data. Kaminsky and Reinhart (1999, p. 476) argued that “Indicators of business failures and non-performing loans are also usually available only at low frequencies, if at all; the latter are also made less informative by banks’ desire to hide their problems for as long as possible.” This means that it is necessary to use all available financial information from the official financial statements of banks as fully and comprehensively as possible for making financial analysis of banks’ performance.

The contemporary banking crises can be classified mostly as “growth crises”, which are characterized by economic deregulation and liberalization, removal of cross-border restrictions on capital flows, and increased competition in the financial sector. Based on a newly constructed cross-country database of financial liberalization, Abiad and Mody (2003) examined the experience of 35 countries over the period 1973–1996 to analyze underlying causes of financial sector reforms. They found that liberalization is a combination of discrete changes in response to economic and political “shocks”, reinforced by a self-sustaining dynamics (they called it “learning”). They draw five specific conclusions about what produce changes (reform):

- Countries whose financial sectors are fully repressed (unliberalized) are the ones with the strongest tendency to maintain their policy stance and hence remain closed and highly regulated. But, initial reforms cause changes that make further reforms necessary.
- Regional diffusion effects appear to be important – the further a country’s stage of liberalization is from that of the regional leader, the greater is the pressure to liberalize.
- Shocks to the economic environment (a new government; decline in US interest rates) play an important role in weakening the *status quo* and making reforms possible.

- Crises do trigger action, but not always is the direction of reform – balance of payments crises raise the likelihood of reform; banking crises have the opposite effect.
- Among variables representing ideology and structure, only trade openness appears related to the pace of reform. Not important: presidential or parliamentary regimes, right- or left-wing governments, and the legal system prove not to be influential either.

It is evident that to study results of financial sector reform and restructuring, a profound performance analysis is needed. The traditional financial ratio analysis is mainly used for bank performance analysis. We can find different versions of this approach from various textbooks about banking and financial institutions. Different versions of DuPont financial ratio analysis (see Cole, 1973) seem to be more promising for banks' and other financial institutions' performance analysis (see, for example, Dietrich, 1996). The focus of financial analysis for the management of any bank (or the banking sector as a whole) should be on the efficiency of performance of the bank measured from the viewpoint of investors/owners' income maximization. More widely, all stakeholders have to be interested in the performance of the bank. The concept of a "stakeholder monitor" is useful in designing performance analysis of any bank. This concept was developed by David Llewellyn (see Llewellyn, 2002; Llewellyn and Mayes, 2003). We agree with the suggestion that "Stakeholders, as the name implies, have something in stake in the relative success or failure of the firm. Those who participate in the process of observing the behavior of the firm and forming judgements in the light of it can be described as "monitors". Such monitors may have access to both market and private information. Combining these ideas, "Stakeholder monitors" are all those agents who have an interest in the outcome of the monitoring process" (Llewellyn and Mayes, 2003, p. 11). The incomplete list of "stakeholder monitors" includes: supervisory agencies, rating agencies, market traders, shareholders, board of directors, debt-holders, depositors, managers, borrowers, employees.

In carrying out bank performance analysis, it is important to emphasize that banks differ in their corporate governance from firms in other, less regulated industries. These differences, in turn, present their own challenges for bank managers, regulators, depositors, investors, and other stakeholders. "Bank managers live in a more complex environment than their peers in industry due to bank regulations. In addition to the demands placed on them by shareholders, regulators have strong incentives to influence managerial action, and this may be in conflict with shareholder demands" (Harm, 2002, p. 5). Governance is a set of mechanisms with which the

providers of capital and other stakeholders are defending their interests against the firm. The firm is run by managers, and this is a point where conflicts of interests start. Harm (op. cit., pp. 109–128) presents also an excellent survey of recent literature (both theoretical and empirical).

Macey and O’Hara (2003) argue that bank officers and directors should be held to broader (if not higher) set of standards than their counterparts in less regulated non-financial firms, and banks pose special corporate governance problems. Kose and Qian (2003) consider another important theme in the corporate governance of banks – the effect of the incentive features built into the compensation schemes of bank managers. Adams and Mehran (2003) focus also on the differences between the corporate governance of banks and manufacturing firms and support the theory that governance structures are industry-specific. In general, the components of firm’s governance structure are determined by various factors, which all will influence also performance analysis aims and techniques: the nature and structure of firm’s assets and liabilities (leverage, share of financial assets, business risk, cash-flow patterns), firm size, industry, regulations, etc.

For performance analysis mainly various measures of rates of return are used. We fully agree with the opinion that “Relying too heavily on just a few indicators of bank profitability can be misleading. While ROA, ROE, and interest margin (and non-interest expenses) to gross income remain the key measures, they should ideally be supplemented by the analysis of other operating ratios” (Sundararajan et al., 2002, p. 20). In this article, we present one of the possible approaches to such financial analysis using the modified version of DuPont analysis (see Cole, 1973), which is similar to Dietrich’s (1996) approach (see also Vensel, 2001). We have selected the following years for empirical analysis of the Estonian banking system performance:

1994 – the first year of macroeconomic stabilization after the currency reform in June 2002 and after resolution of the first banking crisis in Estonia;
1997 – extraordinarily optimistic year, the first unsuccessful attempts of Estonian banks to expand into Russian and Baltic countries’ markets, “bubble” of the Tallinn Stock Exchange;
2000 – the second phase of macroeconomic stabilization and resolution of the second banking crisis in Estonia;
2001–2002 – last years before accession to the EU.

The most important recent developments in the Estonian banking system are presented in the next section (some historical notes; banking crises and banks’ rehabilitation; structural developments). Then, a modified methodology of DuPont financial ratio analysis and empirical results of the

Estonian banking system performance are discussed. The paper ends with some concluding remarks.

2. Development of the Estonian Banking System

The first commercial bank (Tartu Commercial Bank) on the territory of the former Soviet Union was established in Estonia in 1988. This bank went bankrupt and was liquidated in 1992–1993. As there was a great demand for banking services by the emerging private sector, the maximum number of commercial banks operating simultaneously in the small Estonian banking market was 42 in 1992. Some of them were liquidated during the banking crises in 1992–1994 and in 1998–1999, and some of them were merged into larger commercial banks. In 1998, a wave of mergers and restructuring took place in the Estonian banking sector. After the completion of these mergers, Scandinavian banks started to show greater interest in the Estonian banking market. As a result, *Swedbank* acquired 56% of *Hansapank* and *Skandinaviska Enskilda Banken* (SEB) acquired 32% of the Union Bank of Estonia. We may conclude that the Estonian banking sector became healthier when Swedish banks and other Nordic investors joined the circle of bank owners, improving the future outlook of the banking system. So when during the first banking crisis in 1992–1994, Estonia had to resolve the problems by itself, then during the second banking crisis in 1998–1999, foreign banks also helped and supported to get over the crises.

Estonia has experienced two serious banking crises during the about 12-years period of its banking sector development and restructuring, the first crisis in 1992–1994 and the second in 1998–1999. The first banking crisis occurred during the hard period when drastic economic restructuring was started and when production output was reducing dramatically and the country underwent a period of hyperinflation. The characteristic feature of the first banking crisis in Estonia was that it was caused by internal reasons and it was overcome with Estonia's own resources and management skills. The main causes of this banking crisis were severe problems in the whole economy, poor bank management and lack of professional skills, weak supervision both from the side of the central bank and owners. The depositors' losses in the banking crisis were large, the money supply decreased, many loans were depreciated, and the trustworthiness of the banking system fell significantly.

Looking back, it is possible to establish some signs of the banking crisis in 1998–1999:

- (1) Estonian banks took extraordinarily high financial risks through investment companies and their subsidiary companies to get large profits via speculating in securities market – rapid fall in prices on the share market in autumn 1997 reduced significantly banks' profits and at the end of 1997 and in 1998 almost all banks operated at losses;
- (2) Banks held a very high negative level of gap (interest rate sensitive liabilities exceeded significantly rate-sensitive assets) for earning excessive profits in the environment where interest rates steadily decreased during the previous years and they were not able to adjust to changed environment with increasing interest rates from the second half-year of 1997;
- (3) Commercial banks absorbed heavily into non-banking business – for example, the later bankrupted Land Bank of Estonia owned seven subordinate establishments and related companies, which dealt with leasing and investing, and with anything else but banking (hotels, processing agricultural products, broadcasting etc.); also other banks were absorbed in risky non-banking business;
- (4) The decision to expand to the Eastern market (Russia and other Baltic States), where the interest rates and possible profitability seemed to be higher, was also too risky and premature, especially in the framework of the Russian crisis in 1998;
- (5) There were various disputes and conflicts of interests between the owners and management, which led to wrong (mismanagement) decisions. Good examples should be the Land Bank of Estonia and the Estonian Investment Bank – for example, the shareholders of the Investment Bank intended to sell the bank to the German Schleswig-Holstein Bank in autumn 1997, but the top executives threatened to hand in a collective resignation and so the bank was sold to them;
- (6) Sometimes there were inadvisable relations between the bank management and political powers, and corresponding political pressure – a typical “political” bank was the Land Bank of Estonia where almost all financial risks were ignored and later the Government lost its deposits in the bank amounting to more than 800 million Estonian kroons, EEK (more than 50 million euros).

The authors are of the opinion that the currency board arrangement helped to resolve banking crises rapidly and mostly effectively without very large rehabilitation costs in Estonia. The main instruments for anticipating banking crises are tightening of prudential requirements and strengthening of banking supervision. Recent changes in the operational framework for monetary policy and banks' prudential ratios in Estonia were aimed at

enhancing financial stability and increasing the liquidity buffers of the financial system. In short-term, the priority focused on restoring foreign investors' confidence in Estonian economic viability.

We may argue that the currency board arrangement practically did not help banks that were in trouble because its resources are intended for guaranteeing the local currency and the central bank is not acting as the lender of the last resort. The currency board is not able to avoid banking crises and cannot guarantee a “soft landing” and rehabilitation of banks in trouble. At the same time, the currency board arrangement supported and strengthened the discipline and responsibility of the main actors – banks, the central bank, depositors, and the Government. A stable currency and presence of respective financial safety net compensated for the absence of classical lender-of-last resort facility and ensured the development of a generally reliable banking sector.

Table 1 Ownership Structure of Estonian Banks, %

Year	Estonian Owners				Non-Resident Owners			
	Public Sector	Legal Persons	Individuals	Total	Banks	Legal Persons	Individuals	Total
1996	12.0	NA	NA	62.8	10.3	NA	NA	37.2
1997	4.2	41.6	11.3	57.1	22.7	19.6	0.6	42.9
1998	13.6	22.3	8.6	44.5	45.5	9.5	0.5	55.5
1999	11.6	15.2	11.0	37.6	52.6	8.9	0.7	62.2
2000	0.0	6.8	9.3	16.1	67.0	16.7	0.2	83.9
2001	0.0	5.6	8.5	14.1	63.3	22.3	0.3	85.9
2002	0.0	5.2	8.1	13.3	79.0	7.6	0.1	86.7

Source: Estonian Bank

The structure of the Estonian banking sector has changed fundamentally during the last years. Today, the banking system is highly concentrated and two Swedish-owned banks dominate in the market. The consolidation process continued throughout the second banking crisis in 1998–1999 and resulted in fundamental bank reorganizations. We can notice all three worldwide trends in the financial consolidation process also in the Estonian market: domestic consolidation, foreign entry and cross-border consolidation, and the formation of financial conglomerates and bank assurances. The ownership structure of Estonian banks is presented in Table 1. The dependence of the Estonian banking system on the developments in

international financial markets and on foreign investors' preferences has deepened from year to year. In the course of the restructuring process, foreign banks increased their share in equity capital from 10.3% in 1996 to 79% at the end of 2002. The total share of non-resident owners had risen to 86.7% by the end of 2002.

3. DuPont Financial Ratio Analysis

The starting point of bank performance analysis is to calculate the book rate of return on equity, ROE

$$ROE = \frac{\text{Earnings After Taxes, } EAT}{\text{Book Value of Equity, } BVE} \quad (1)$$

which consists of three components:

- pull-through, U

$$U = \frac{\text{Earnings After Taxes, } EAT}{\text{Earnings Before Taxes, } EBT} \quad (2)$$

- financial leverage, LEV

$$LEV = \frac{\text{Total Assets, } TA}{\text{Book Value of Equity, } BVE} \quad (3)$$

- return on total assets, ROA

$$ROA = \frac{\text{Earnings Before Taxes, } EBT}{\text{Total Assets, } TA} \quad (4)$$

These financial ratios form the multiple factor system

$$ROE = \frac{EAT}{EBT} \times \frac{TA}{BVE} \times \frac{EBT}{TA} = \frac{EAT}{BVE} \quad (5)$$

Changes in ROA are usually the cause of the most important changes in banks' performance and need a more detailed analysis. The other financial ratios such as components of ROE , pull-through (U) and financial leverage (LEV), reflect tax treatment and capitalization rate, and they usually change less. ROA may be divided into the following components:

- bank burden, B

$$B = \frac{\text{Net Non - Interest Revenue, } NNIR}{\text{Total Assets, } TA} = \frac{NIR - NIE}{TA} \quad (6)$$

where NIR - non-interest revenue;

NIE - non-interest expense;

- earning assets ratio, *EAR*

$$EAR = \frac{\text{Earning Assets, } EA}{\text{Total Assets, } TA} \quad (7)$$

- net interest margin, *NIM*

$$NIM = \frac{\text{Net Interest Revenue, } NIR}{\text{Earning Assets, } EA} = \frac{IR - IE}{EA} \quad (8)$$

where *IR* - interest revenue;

IE - interest expense,

Financial ratios (6-8) form a factor system

$$ROA = \frac{NNIR}{TA} + \frac{EA}{TA} \times \frac{NIR}{EA} = \frac{NNIR + NIR}{TA} = \frac{EBT}{TA} \quad (9)$$

For a more detailed analysis, *NIM* may be divided into the following three components:

- return on earning assets, *REA*

$$REA = \frac{\text{Interest Revenue, } IR}{\text{Earning Assets, } EA} \quad (10)$$

- cost of liabilities, *COL*

$$COL = \frac{\text{Interest Expense, } IE}{\text{Liabilities, } L} \quad (11)$$

- liabilities to earning assets ratio, *LEA*

$$LEA = \frac{\text{Liabilities, } L}{\text{Earning Assets, } EA} \quad (12)$$

which form the factor system

$$NIM = \frac{IR}{EA} - \frac{IE}{L} \times \frac{L}{EA} = \frac{IR - IE}{EA} = \frac{NIR}{EA} \quad (13)$$

Initial financial information for Estonian banking sector performance analysis (1994–2002) is presented in Table 2 on the basis aggregated consolidated financial statements published by the Bank of Estonia.

Table 2 Simplified Consolidated Financial Statements of the Estonian Banking System (million kroons)

<i>Income Statement Data</i>	1997	2000	2001	2002	2003	03/97	03/02
Interest Revenue, IR	2658.5	3744.2	4308.1	4253.5	3868,7	1,453	0,975
Interest Expense, IE	1217.5	1811.9	2125.7	1883.0	1708,2	1,403	1,009
Net Interest Revenue, NIR = IR – IE	1444.1	1932.3	2182.4	2370.5	2160,5	1,496	0,949
Non-Interest Revenue, NOIR	3272.0	2065.6	2895.1	2613.4	2716,2	1,604	1,000
Non-Interest Expense, NOIE	3644.4	3384.8	3373.7	3769.1	2547,5	1,233	0,994
Net Non-Interest Revenue, NNIR = NOIR – NOIE	-372.4	-1319.2	-478.6	-1155.7	-168,7	0,451	-1,120
Earnings Before Taxes, EBT = NIR + NNIR	1068.9	613.1	1703.8	1214.8	2717,5	2,539	1,212
Earnings After Taxes, EAT	963.1	613.1	1683.4	1153.2	2562,5	28.20	0.685
Balance Sheet Data							
Cash and Reserves, R	3203.8	6578.0	6212.3	5166.2	5100,3	1,654	1,033
Earning Assets, EA	25817.0	42019.6	53544.0	66827.5	78098,7	3,258	1,197
Fixed and Other Assets, FA	2743.1	3847.3	3358.7	3054.9	2604,4	0,978	0,868
Total Assets, TA = R+EA+FA	31763.9	52444.9	63115.0	75048.6	85803,4	2,884	1,173
Liabilities, L	28562.7	45164.2	54936.0	65549.2	72504,9	2,714	1,160
Book Value of Equity, BE	3201.2	7280.7	8179.0	9499.4	13298,5	4,377	1,248

Source: The Bank of Estonia Annual Reports

Using initial data from Table 3 (the balance sheet data are averaged), results of DuPont financial ratio analysis are presented in Table 3.

Table 3 Financial Ratio Analysis of Estonian Commercial Banks (1997–2003)

Financial Ratio	1997	2000	2001	2002	2003	03/97	03/02
<i>Book Rate of Return, %</i> , $ROE = EAT/BE$	30.09	8.59	20.58	12.14	19,26	0,606	0,936
Pull-through, %, $U = EAT/EBT$	90.10	100.0	98.80	94.93	94,30	1,047	0,965
Financial Leverage, $LEV = TA/BE$	9.92	7.203	7.717	7.90	6,43	0,657	0,937
<i>Return on Total Assets, ROTA = EBT/TA</i>	3.365	1.192	2.700	1.619	3,167	0,88	1,033
<i>Components of ROTA, $ROTA = B + EAR \times NIM$</i>							
Burden, %, $B = NNIR/TA$	-1.172	-2.493	-0.755	-1.540	-0,197	0,157	-0,961
Earning Assets Ratio, %, $EAR = EA/TA$	81.28	80.12	84.84	89.05	91,02	1,129	1,021
Net Interest Margin, %, $NIM = NIR/EA$	5.594	4.599	4.076	3.547	2,766	0,460	0,665
<i>Components of NIM, $NIM = REA - COL \times LEA$</i>							
<i>Return on Earning Assets, REA = IR/EA</i>	10.30	8.921	8.046	6.365	4,954	0,446	0,814
Cost of Liabilities, %, $COL = IE/L$	4.263	4.012	3.869	2.873	2,356	0,517	0,870
<i>Liabilities to Earning Assets Ratio, $LEA = L/EA$</i>	1.106	1.075	1.026	0.981	0,928	0,833	0,969

Source: Authors' calculations

4. Econometric Modelling

As far as we know, nobody has earlier used the existing information about banks to construct production function type econometric models treating banking as a separate sector of a country (Aarma and Vainu, 2003). One can ask what is the production or product of a bank? In our opinion the product of the bank is the amount of the services, the volume of which can be measured by the total income of the bank what is the measure of the amount of production.

We selected the total income of the banks (y) as the output variable (dependent variable) and used profit earning assets (x_1), equity (x_2), liabilities (x_3) and fixed assets (x_4) as factors (independent variables). The time series were treated as consisting of three components:

$$y(t) = f(t) + h(t) + e_t \quad (14)$$

where $y(t)$ – the actual time series;
 $f(t)$ – the linear trend in the time series;
 $h(t)$ – the harmonious component in the time series;
 e_t – residuals.

The harmonious component is determined as Fourier's series:

$$h(t) = a_0 + \sum_{j=1}^k (a_j \cos \alpha + b_j \sin \alpha), \quad \alpha = j \frac{t2\pi}{T} \quad (15)$$

where j – the number of harmonious component,
 t – time,
 T – length of the time series (the number of periods).

We chose the power function as the type of the model.

$$y = ax^\alpha z^\beta, \quad \alpha + \beta = 1. \quad (16)$$

To estimate the parameters a , α and β with the method of least squares it was first necessary to find logarithms of the primary data. Then, according to the rules of analyzing time series, we checked the existence of trend and harmonious component in the time series of the logarithms of the selected parameters and got next results.

Trendlines:

$$\ln y = 6,2067 + 0,0398t \quad (17)$$

$$\ln x_1 = 9,25 + 0,0612t \quad (18)$$

$$\ln x_2 = 7,0659 + 0,0738t \quad (19)$$

$$\ln x_3 = 9,4373 + 0,0542t \quad (20)$$

$$\ln x_4 = 7,0913 + 0,3206 \ln t \quad (21)$$

Harmonious components:

$$u \ln y = \ln y - f(t) = -0,1006 \cos \alpha - 0,0134 \sin \alpha - 0,0421 \cos 2\alpha + 0,0994 \sin 2\alpha - 0,0787 \cos 3\alpha - 0,0696 \sin 3\alpha \quad (22)$$

$$u \ln x_1 = -0,1749 \cos \alpha + 0,0583 \sin \alpha - 0,0850 \cos 2\alpha - 0,0992 \sin 2\alpha \quad (23)$$

$$u \ln x_2 = -0,3193 \cos \alpha + 0,0691 \sin \alpha + 0,0326 \cos 2\alpha - 0,1142 \sin 2\alpha \quad (24)$$

$$u \ln x_3 = -0,1743 \cos \alpha + 0,0514 \sin \alpha - 0,0749 \cos 2\alpha - 0,0861 \sin 2\alpha \quad (25)$$

$$u \ln x_4 = -0,2073 \cos \alpha + 0,0453 \sin \alpha \quad (26)$$

We treated all possible combinations of the factors and obtained only the one model that proved to be statistically significant:

$$\ln y = -2,2884 + 0,0074t - 0,1288 \ln t + 0,087 \cos \alpha - 0,0092 \sin \alpha + 0,0027 \cos 2\alpha + 0,1009 \sin 2\alpha - 0,0787 \cos 3\alpha - 0,0696 \sin 3\alpha + 0,5984 \ln x_3 + 0,4016 \ln x_4 ,$$

what gives finally the next result:

$$y = 0,1014x_3^{0,5984}x_4^{0,4016}t^{-0,1288} \exp \begin{bmatrix} 0,0074t + 0,087 \cos \alpha - 0,0092 \sin \alpha + \\ + 0,0027 \cos 2\alpha + 0,1009 \sin 2\alpha - \\ - 0,0787 \cos 3\alpha - 0,0696 \sin 3\alpha \end{bmatrix} .(27)$$

5. Conclusion

The development of the Estonian banking sector is described by a quite rapid nominal growth of total assets, loan portfolios, net income and other quantitative financial indicators. The capitalization of Estonian banks improved, and the share of non-residents in the share capital increased significantly.

Some most important empirical results of the use of the DuPont financial ratio analysis for the Estonian commercial banking system (1997–2003) are as follows (see Table 3):

- The book rate of return on equity (ROE) decreased during the analyzed period from 31,73% in 1997 to 19,26% in 2003. We can also mention very high volatility of profitability ratios (both ROE and ROA) during the analyzed period. Banks' financial leverage ratio (LEV) decreased substantially due to the central bank's new equity requirements, which forced banks to raise equity or to merge.
- The average return on earning assets (REA) has fallen substantially over the recent years due to the overall falling of interest rates in the Estonian banking market. REA has fallen much faster than average cost of liabilities (COL), i.e. the interest spread decreased considerably over the analyzed period. This change reflects the sharpened competition between banks themselves and with other financial institutions, as for example insurance and investment funds.
- It is possible to treat and analyse a bank as an enterprise. Model (14) shows that the most important factors in development of Estonian banking system have been liabilities (what is the loan resource) and fixed assets.

References

- [1] ABIAD, A., MODY, A. *Financial Reform: What Shakes It? What Shapes It? (IMF Working Paper No. 03/70)*. Washington, DC: IMF. 2003.
- [2] ADAMS, R., MEHRAN H. (2003). *Is Corporate Governance Different for Bank Holding Companies?* Federal Reserve Bank of New York Economic Policy Review, 9, 1, 2003, pp.123–142.
- [3] COLE, D. *Return on Equity Model for Banks*. The Bankers Magazine. Spring 1973.
- [4] DIETRICH, J. K. *Financial Services and Financial Institutions*. Prentice Hall 1966.
- [5] HARM, C. *Bank Management between Shareholders and Regulators*. SUERF Studies No. 21. Vienna: SUERF, 2002.
- [6] HYYTINEN, A., TAKALO, T. *Preventing Systemic Crises through Bank Transparency*. Bank of Finland Discussion Papers No. 25/2003. Helsinki: Bank of Finland, 2003.
- [7] KAMINSKY, G. L., REINHART, C. M. *The Twin Crises: The Causes of Banking and Balance-of-Payments Problems*. American Economic Review, 89, 2, 1999. pp. 473–500.

- [8] KOSE, J., QIAN, Y. *Incentive Features in CEO Compensation in the Banking Industry*. Federal Reserve Bank of New York Economic Policy Review, 9, 1, 2003. pp. 107–121.
- [9] LLEVELLYN, D. T. *Comment*. In G. G. Kaufmann, ed. *Prompt Corrective Actions: Ten Years Later*. Amsterdam: JAI , 2002. pp. 321–333.
- [10] LLEVELLYN, D. T., MAYES, D. G. *The Role of Market Discipline in Handling Problem Banks*. Bank of Finland Discussion Papers 21/2003. Helsinki: Bank of Finland.
- [11] MACAY, J. R., O’HARA, M. *The Corporate Governance of Banks*. Federal Reserve Bank of New York Economic Policy Review, 9, 1, 2003. pp. 91–107.
- [12] SUNDARARAJAN, V., ENOCH, C., SAN JOSE, A., HILBERS, P., KRUEGER, R., MORETTI, M., SLACK, G. *Financial Soundness Indicators: Analytical Aspects and Country Practices*. IMF Occasional Paper No. 212. Washington DC: IMF, 2002.
- [13] VENSEL, V. *Estonian Banking System Performance, 1994-2000*. In: Vensel, V. and Wihlborg, C., eds. *Estonia on the Threshold of the European Union: Financial Sector and Enterprise Restructuring in the Changing Economic Environment*. Tallinn: Tallinn Technical University Press, 2001. pp. 23–43.

IMPACT OF FOREIGN BANKS' ENTRY ON THE STABILITY AND PERFORMANCE OF BANKS: EVIDENCE FROM THE CEE COUNTRIES¹

Janek Uiboupin

University of Tartu

Faculty of Economics and Business Administration

4 Narva Road

51009 Tartu

Estonia

e-mail: Janek.Uiboupin@mtk.ut.ee

telephone: +372 7 376 335

Abstract

The aim of the paper is to identify the main effects of foreign banks' entry on the stability and performance of banks in the Central and Eastern European Countries. The FDI theory applied to banking sector is used to distinguish between competition and spillover effects of foreign banks' entry on the behavior of the domestic banking sector. Bank level accounting data from 10 CEE countries is used in empirical analysis. Arellano-Bond dynamic panel data estimation technique used in the regressions. In addition, a summary of a survey based questionnaire conducted in four CEE countries is presented for the qualitative analysis. The results are that foreign banks' entry is likely to reduce the profitability of local banks through the increasing level of competition and foreign banks' entry contributes to the stability of local banking sector in short run.

Keywords: *Bank performance; banking sector stability; foreign bank's entry; transition countries*

¹ Financial support by the Estonian Science Foundation grant nr 5306 is greatly acknowledged.

1. Introduction

The internationalization process of firms has been intensively studied since the 1960s. Due to the increase in international capital flows, foreign direct investments and international trade at that time, active development of international banking also began. In the transition countries, international banks have operated only since the beginning of the 1990s, after a significant liberalization of the financial market and elimination of entry barriers. At present foreign banks already have more than 60 per cent of the market in the CEE countries.

Growing foreign ownership in the banking sector raises several interesting questions about the entry process of foreign banks into transition economies. There are no generally accepted theories to explain the internationalization process of banks in the transition economies and its implications. The main reason for this gap in the literature is that foreign bank entry into emerging market has been actual only with the “third wave” of international banks’ activities during the second half of 1990s (Herrero and Simón 2003, p. 3).

The aim of the paper is to identify the effect of foreign banks’ entry on bank performance and stability in the CEE countries.

The reminder of the paper is structured as following: in the second section, the recent foreign bank entry literature is discussed. The effect of foreign banks entry on the performance of banks is discussed in section three. The volatility of credit supply and effect of foreign banks entry on the quality of loan portfolio of local banks is analyzed in section four. In section five the results of questionnaire based survey are presented. Conclusions of the paper are summarized in section six.

2. Theoretical aspects of foreign banks’ entry effects

The first argumentation that greater international financial competition should improve the credit supply is based on the financial liberalization (FL) framework. McKinnon (1973) and Shaw (1973) proposed that there is excess of credit demand in less developed countries and elimination of entry restriction would make it possible for multinational banks to satisfy the excess of credit demand.

Theorists who discuss the impact of FDI underscore the importance of inter-industry and intra-industry spillover effects. The extent of intra-industry spillover effects of FDI on technology transfer depend on a particular local firm’s own ability to innovate and imitate (Glass and Saggi, 1998; Petit and

Sanna-Randaccio 2000). Technology diffusion with FDI is rather a complicated topic. Teece (1977) pointed out several channels for technology run to domestic firms, namely labor flow from foreign to domestic firms, imitation and liberalization (removal of entry barriers to foreign firms).

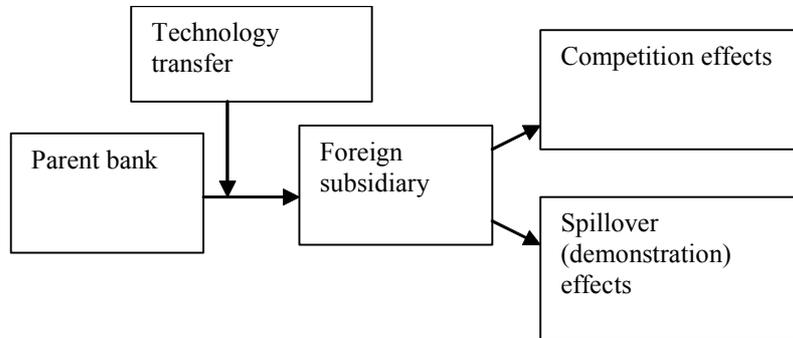
It is also suggested that spill-over effects of foreign entry depend on how much the domestic and foreign banking market differ by their levels of development. This phenomenon is known as the “technology gap hypothesis” which suggests that the spillover effects from FDI to domestic firms will occur only if the technology gap is not overly large and if the country has a minimum required level of human capital (Borensztein *et al* 1998; Kokko 1994; Konings, 1999). An overly large technology gap between the foreign enterprise and domestic firm will lead to the dominance of competition effects. Aitken and Harrison (1999) showed that the productivity of domestic firms was negatively affected by FDI in Venezuela, where the competition effect slightly dominated. The reason was that foreign firms were “market stealers” who forced the domestic firms to produce less, which lead to an increase in the average cost.

Besides the quantity of knowledge transfer, it is important to consider the level of quality of the knowledge transfer. Glass and Saggi (1998) found in their general equilibrium model that host countries with a higher technology gap receive lower technological quality with FDI. The capability to imitate and accept technology transfer is known as “absorptive capacity”. Countries that are able to imitate more and have a more intensive level of local research and development (R&D) receive more high-quality technological FDI. Therefore their conclusion about policy is that host countries should enhance the imitation by supporting local R&D to receive high-quality FDI. Glass and Saggi (1998) found on the example of the oligopoly model that if a host firm (country) has a lower technological level than the source firm (country), then there are at least two rationales for attracting FDI: higher profits of the host firm or a wage premium benefiting workers.

The application of FDI literature into banking sector would mean that the transfer of know-how from parent bank to a subsidiary has both competition and spillover effects on host banking sector (see Figure 1). Foreign subsidiary that operates more effectively due to more modern banking technology taken over from mother banks forces other. There could also be spillover effects – domestic banks can learn from foreign banks. Thus the competition effect can work in two ways: either domestic banks have high absorptive capacity and become more effective (catch-up effect), or if the technology gap is too high then domestic banks are unable to compete with foreign banks and foreign banks will just easily increase their market

shares (market-stealing effect). The technology transfer and local firms' reaction to foreign banks' entry therefore depend on the development of the financial sector.

Figure 1. Effect of technology transfer on the local banking sector.



Source: Compiled by the author.

A most comprehensive empirical survey about foreign banks entry was carried out by Claessens *et al* (2001) who investigated the relationship between foreign banks entry and the performance of the domestic banking sector in 80 countries. They used panel estimations with 7,900 bank observations for 1988–1995. The main result of the study was that foreign banks tend to have higher profits than domestic banks in the developing countries, while in developed countries foreign banks are less profitable than domestic banks. Their results also indicated that higher foreign bank presence is related with lower profitability, costs and margins of domestic banks.

Hermes and Lensink (2003) developed further the model used by Claessens *et al* (2001). They used bank-level accounting data from 990 banks in 48 countries for the period 1990-1996. Threshold estimations were used to study how foreign banks entry effects are related, in a short term, with the economic development of the countries involved. The results indicate that at a lower level of economic development, foreign banks entry is associated with higher costs and margins for domestic banks. At a higher level of economic development, on the other hand, foreign banks entry has a less significant effect on domestic banks' profitability. This result adds some support to the technology gap hypothesis.

Zajc (2004) analysed foreign banks entry effects on domestic banks in the Czech Republic, Estonia, Hungary, Poland, Slovakia and Slovenia for the period 1995–2000. His results are somewhat different from those presented

by Claessens *et al* (2001). He found that foreign banks entry is associated with lower non-interest income but increases overhead expenses.

Mathieson and Roldos (2001) pointed out two related issues: whether the presence of foreign banks makes systemic banking crises more or less likely to occur, and whether there is a tendency for foreign banks to “cut and run” during the crises periods. In general, it has been suggested that foreign banks can provide a more stable source of credit because branches and subsidiaries of large international banks can draw on their parent (which typically hold more diversified portfolios) for additional funding. Large international banks are likely to have better access to global financial markets and the entry of foreign banks can improve the overall stability of the host country’s banking system (stronger prudential supervision; better disclosure, accounting and reporting practice, etc.).

Bonin and Ábel (2000: 8) addressed that foreign bank entry is a double-edged sword as it is welfare enhancing for the host country’s banking sector as a whole but often threatening to the market position of already weak domestic banks as foreign banks cream skim by taking away good clients.

Cárdenas *et al* (2002) suggest that along with better services and management techniques, there can be also some adverse effects of foreign control. Foreign subsidiaries are often centrally controlled and are supposed to focus only on local market and cut majority of international activities. This can be harmful for stability during a shock in local market as the subsidiary’s asset portfolio is concentrated into local market.

One of the important issues of foreign banks’ entry is a possible reduction of credit in host country. For example Weller (2000) found that foreign bank entry led to reduction of credit supply by Polish domestic banks. Clarke *et al* (2004) concluded that the privatization and foreign bank entry are not negatively associated with the credit supply in Argentina, at least not in long term.

3. Effect of foreign bank entry on bank performance in the CEE countries

3.1 Data and methodology

In the current paper I use both bank-level and macro-level data to investigate the relationship between foreign banks entry and banks’ performance. A foreign bank is defined as foreign if it is at least 50 percent foreign owned, i.e. more than 50 percent of its share capital is owned by foreign residents. The study covers the 1995–2001 data of 10 countries:

Bulgaria, Croatia, the Czech Republic, Estonia, Hungary Latvia, Lithuania, Poland, Slovakia and Slovenia. The annual data is used in the following subgroups: bank-level accounting data, foreign banks entry data, the country's specific variables and the banking market development data. A detailed description of all variables used in the analysis is given in Appendix 1.

Bank-level accounting data was obtained from the Bankscope database; panel data for 319 banks during 1995–2001 was used. An important difference between the current and previous studies is that both foreign and domestic banks are included into the sample. Several balance sheet variables and profit statement variables are used. First, I use two variables measuring the income of banks: net interest margin (NIM) and non-interest income to total assets (OOITA). Second, a bank's profitability is characterised by the ratio of its before-tax profits to total assets (PTPTA). Third, a bank's costs are measured by two variables: overhead costs to total assets (OHTA) and loan loss provisions to total assets (LLPTA). These variables are calculated on the basis of the bank's income statement and balance sheet. The following internationally comparable accounting identity is used:

$$PTPTA = NIM + OOITA - OHTA - LLPTA \quad (1)$$

The bank-specific exogenous variables are as follows: short-term and long-term deposits and other funding to total assets (CSTFTA), equity ratio to total assets (ETA), and non-earning assets to total assets (NEATA).

I use two different foreign entry variables: the share of foreign banks' assets in the total banking market assets (FSA), and the ratio of foreign banks to the total number of banks (FBSN). Since Bankscope covers about 90% of the banks on the market and the precise ownership structure of a bank is described only in the last reporting period, it is not possible to calculate foreign ownership by aggregating the data of the reporting banks, because of the danger to either overestimate or underestimate the proportion of foreign ownership on the market. The possibility to overestimate foreign ownership comes from the fact that foreign banks are more active internationally and also provide data more actively to Bankscope. The possibility to underestimate foreign ownership in some countries is also quite high because Bankscope does not cover branches of foreign banks, and therefore the countries where the main foreign bank entry mode has been branching tend to significantly underestimate foreign ownership on the market. The problem of data is more relevant for small countries like Estonia, Latvia and Lithuania, where the number of banks is small, and the absence of even two or three banks from the database may significantly affect foreign ownership data. To overcome these problems, different sources of data was used. Foreign banks'

share in the total assets (FSA) data was drawn from Bankscope and national central banks, while foreign banks' share in the total number of banks (FBSN) was obtained from the EBRD Transition Report 2003.

The development of the banking sector is characterised by the ratio of domestic private credit to the GDP (DCGDP). This is a widely used measure of banking sector development, used also by Hermes and Lensink (2003). Another banking-market-specific variable used is the concentration index, calculated as the ratio of three biggest banks' assets to total banking market assets in the given country (CONC). Market concentration data is obtained from the database provided by the website of Asly Demirgüç-Kunt from Worldbank. The DCGDP data is from the EBRD Transition report 2002.

Three country-specific variables are included. Similarly to Claessens *et al* (2001), Hermes and Lensink (2003), and Zajc (2004) real GDP growth (GDPG), GDP per capita (INCOME, in logarithm) and inflation rate (CPI) are included as indicators of macroeconomic development. All country variables were obtained from the EBRD Transition Report 2002. The sample is unbalanced because of lack of data for some banks in some periods. The number of observations varies between 884 and 1041.

Next the short-term relationship between foreign banks entry and bank performance is tested empirically. The analysis starts with the empirical model which is similar to that used by Claessens *et al* (2001):

$$\Delta I_{ijt} = \alpha_0 + \beta_j \Delta FS_{jt} + \delta_{ij} \Delta B_{ijt} + \gamma_j \Delta X_{jt} + \varepsilon_{ijt} \quad (2)$$

where I_{ijt} is a vector of dependent variables for bank i in country j at time t , FS_{jt} is a measure of foreign bank penetration in country j at time t , B_{ijt} is a set of bank-specific variables for bank i in country j at time t . B_{ijt} is included into the equation as a set of control variables. X_{jt} is a vector of country variables in country j at time t .

Then the initial empirical model characterised by equation 2 is developed further, adding banking market development variables and an interactive term of foreign banks entry and banking market development; the same methodology was also used by Hermes and Lensink (2003). The model involving banking sector development and interactive term is as follows:

$$\Delta I_{ijt} = \alpha_0 + \beta_j \Delta FS_{jt} + \gamma_j \Delta FS_{jt} \times DCGDP_{jt} + \delta_{ij} \Delta B_{ijt} + \phi_j BMD_{jt} + \varepsilon_j \Delta X_{jt} + \varepsilon_{ijt} \quad (3)$$

$DCGDP_{jt}$ is a proxy for banking market development in country j at time t , $FS \times DCGDP$ is a variable that has been created by interacting the foreign banks entry variable with the banking market development variable. The interactive term is included to test whether foreign entry effects in a particular country depend on the level of development of that country's

banking market. It can be expected that foreign banks entry has a more relevant impact in the early stage of internationalisation and to be lower when the banking market in the target country is well-developed. It may even be the case that the sign of the coefficient of FS changes from negative to positive or vice versa. The banking market development variables are expected to have a negative effect on the cost and income of a bank.

Finally, an interactive term of foreign banks entry and bank market share is included into the equation. Banks with different market shares may react differently to foreign banks entry. I suggest that smaller banks react more actively, because they are more flexible to changes in market conditions and have to adjust themselves more readily in order to be competitive. The model is as follows:

$$\Delta I_{ijt} = \alpha_0 + \beta_j \Delta FS_{jt} + \gamma_j \Delta FS_{jt} \times MSHARE_{jt} + \delta_{ij} \Delta B_{ijt} + \varphi_j BMD_{jt} + \varepsilon_j \Delta X_{jt} + \varepsilon_{ijt} \quad (4)$$

where $FS \times MSHARE$ is a variable that has been created by interacting the foreign banks entry variable with the banking market development variable.

3.2 Estimation results and discussion

Two variables are used to measure foreign banks' presence: the number of foreign banks as the share of the total number of banks (FBSN) and foreign banks' share in the total assets of the banking market (FSA). An interactive terms with private credit to the GDP (DCGDP) and the bank market share (MSHARE) are also included. Five bank performance measures (ALINT (interest income on interest earning assets), PTPTA, OOITA, OHTA and LLPTA) are the main dependent variables. Stata SE 8 is used for estimations.

Compared with Claessens *et al* (2001), who used a fixed effects model, the methodology for estimating regression coefficients is somewhat different. The Arellano-Bond linear, dynamic panel data estimation technique is implemented which enables to use a lagged term of dependent variable as exogenous variable, and instrumental variables (Arellano and Bond, 1991) to reduce the endogeneity problem and get more consistent estimates. To reduce the heteroskedasticity that is often the problem in micro level panels, robust standard errors are reported (see Stata, 2003). Robust standard errors are higher and therefore relationships are statistically less significant.

It is a general assumption that foreign banks entry at time t is exogenous, i.e. FBSN or FSA do not depend on bank-specific variables at time t (Zajc, 2004). In practice, foreign banks entry may be associated with timing, thus a bank enters the market in year t because of the market

conditions in period t . It may be the case that foreign banks are entering by acquisition at time t because of the crisis period of a single bank or the whole banking market in order to acquire banks at a low price. It can be argued that this makes foreign banks entry partly endogenous. The endogeneity problem here is not very strong, because in most cases the bank's name changes after the merger, and the bank that was acquired, for example, because of negative profit and low price, drops out from period t estimation as all variables are in first differences. Nevertheless, some endogeneity may remain, because sometimes foreign banks consider the average performance of the whole market in period t when making entry decisions.

To reduce possible endogeneity problems in estimations, it is suggested that levels of lag operators can be used (Stata, 2003). Levels of lag operators of foreign bank entry variables (1 period lag of FBSN and FSA) are included as instrument variables.

An important difference between this study and previous works is that I analyse foreign banks entry effects on both foreign and domestic banks' performance. The first differences of variables ensure that the observations of a foreign bank entering the market at time t are not included. Yearly time dummies (1996–2001) are included into the estimations, while regression coefficients of time dummies are not reported. Arellano-Bond estimations include also tests of autocorrelations AR(1) and AR(2) that are not reported. Autocorrelation was not significantly present in the regressions except for ALINT.

The estimation results with FBSN as the foreign banks entry variable are given in Table 1.

Table 1 Foreign bank entry (FBSN) effect on banks' performance

Variable	D(ALINT)	D(PTPTA)	D(OOITA)	D(OHTA)	D(LLPTA)
LD(DEP)	0.0185 (0.0238)	0.1898 (0.1304)	0.0217 (0.0961)	0.3240 (0.2795)	0.2061* (0.1096)
D(FBSN)	-0.1277*** (0.0387)	-0.0252 (0.0408)	-0.0583 (0.0713)	-0.0024 (0.0503)	-0.0700* (0.0409)
D(NEATA)	0.1109* (0.0603)	0.0355 (0.0414)	0.4998* (0.2979)	0.4282 (0.3328)	-0.0251 (0.0773)
D(ETA)	-0.1535 (0.1027)	0.3968*** (0.1310)	-0.0244 (0.3568)	-0.2211 (0.3459)	0.0100 (0.0964)
D(CSTFTA)	-0.0242 (0.0345)	0.0543 (0.0369)	0.1437 (0.0886)	0.0100 (0.0767)	0.0498 (0.0416)
D(MSHARE)	0.1722 (0.1698)	0.2006* (0.1089)	-0.6116** (0.3001)	-0.6354* (0.3334)	-0.1750* (0.1032)
FD	0.0119 (0.0147)	-0.0347 (0.0295)	0.0086 (0.0579)	0.0347 (0.0677)	0.0249 (0.0226)
D(DCGDP)	-0.0247** (0.0295)	0.0574 (0.0505)	0.5085*** (0.1736)	0.5294* (0.3165)	0.1648*** (0.0610)
D(GGDP)	-0.4700*** (0.1669)	-0.0125 (0.1186)	-0.3006** (0.1462)	-0.4822* (0.2508)	-0.0464 (0.1218)
D(LNIN-COME)	0.0039 (0.0440)	-0.0072 (0.0488)	-0.2695** (0.1293)	-0.2694* (0.1454)	-0.0651 (0.0519)
D(CPI)	-0.0036 (0.0033)	0.0051 (0.0043)	0.0344 (0.0266)	0.0103 (0.0259)	0.0026 (0.0018)
D(MMR)	0.0322 (0.0480)	-	-	-	-
Nr. Obs	1036	1041	1035	2021	895
F-Statistic	4.13	2.91	2.08	1.29	2.60

Source: author's calculations. Note: * – significant at 10% level, ** – significant at 5% level, *** – significant at 1% level.

Foreign banks entry variable FBSN has a statistically significant and negative effect on banks' average interest rate on earning assets and loan loss provisions (LLPTA). The author tested the foreign banks entry effect also on the banks' net interest margin, but found no statistically significant relations. Therefore ALINT was used to analyse the effect on interest revenues. It seems that foreign banks entry has a significant effect only on interest income of interest earning assets and not on interest expenses. Hermes and Lensink (2003) found a positive and significant effect of FBSN on non-interest income, whereas Zajc (2004) found similar results. A negative relationship with profitability measures indicates that foreign banks entry enhances the level of competition in the banking sector.

A negative relationship between FBSN and LLPTA shows that foreign banks entry leads to more strict lending policies of the local banks. FBSN is not statistically associated with profits, overhead costs and non-interest income of banks. The banking market concentration index was

excluded from the regression equations because of no significant effect on any dependent variables.

FSA has a somewhat different effect on bank performance. The estimation results in Table 2 show that FSA has a negative effect on the average loan interest rate and a positive effect on loan loss provisions. FSA reflects the relative size of foreign banks versus domestic banks.

Table 2 Foreign banks entry (FSA) effect on bank performance

Variable	D(ALINT)	D(PTPTA)	D(OOITA)	D(OHTA)	D(LLPTA)
LD(DEP)	0.0167 (0.0223)	0.1809 (0.1274)	0.0537 (0.1099)	0.3541 (0.2848)	0.2162** (0.1112)
D(FSA)	-0.0417** (0.0168)	-0.0203 (0.0145)	0.0512 (0.0340)	0.0617 (0.0478)	0.0251** (0.0117)
D(NEATA)	0.1116* (0.0594)	0.0379 (0.0425)	0.5076* (0.3065)	0.4375 (0.3451)	-0.0253 (0.0791)
D(ETA)	-0.1648 (0.1036)	0.3966*** (0.1315)	-0.0321 (0.3647)	-0.2304 (0.3555)	0.0101 (0.0957)
D(CSTFTA)	-0.0285 (0.0316)	0.0495 (0.0370)	0.1345 (0.0889)	-0.0029 (0.0796)	0.0469 (0.0403)
D(MSHARE)	0.2048 (0.1695)	0.2166 (0.1135)	-0.6168** (0.3141)	-0.6512* (0.3422)	-0.1766* (0.0963)
FD	0.0125 (0.0193)	-0.0284 (0.0308)	-0.0067 (0.0539)	0.0227 (0.0648)	0.0140 (0.0187)
D(DCGDP)	0.0088 (0.0340)	0.0598 (0.0472)	0.5347*** (0.1814)	0.5350 (0.3362)	0.1897*** (0.0641)
D(GGDP)	-0.4745*** (0.1681)	-0.0120 (0.1133)	-0.3154** (0.1453)	-0.4654** (0.2470)	-0.0700 (0.1092)
D(LNIN-COME)	0.0280 (0.0447)	0.0018 (0.0503)	-0.2905** (0.1367)	-0.2909** (0.1591)	-0.0675 (0.0523)
D(CPI)	-0.0028 (0.0031)	0.0054 (0.0043)	0.0347 (0.0261)	0.0104 (0.0264)	0.0037* (0.0020)
D(MMR)	0.0703 (0.0463)	-	-	-	-
Nr. Obs	1023	1028	1022	1009	884
F-Statistic	3.63	3.57	1.75	1.26	2.88

Source: author's calculations. Note: * – significant at 10% level, ** – significant at 5% level, *** – significant at 1% level.

The estimation results indicate that if entering foreign banks are comparatively larger than the local banks, then due to the increasing competition on the loan market, the banks offer better loan conditions to firms and this could result in increasing loan losses. From other explanatory variables, MSHARE is negatively associated with overhead costs and non-interest income and positively associated with profits. The results indicate that bigger banks are able to achieve some economies of scale.

The estimation results with interactive term with foreign ownership (FBSN) and banking sector development are given in Table 3. The results

indicate that the development of the banking sector has some effect on short-term foreign banks entry effects. As concluded above, foreign banks entry is generally associated with decreasing interest incomes. Estimations with interactive term FBSN*DCGDP show that in more developed banking markets this fall in interest revenues is lower, because interest rates are already more converged with developed markets.

FSA*DCGDP has a significant effect on average loan interest rates, pre-tax profits and non-interest incomes. Foreign banks entry reduces the profitability of the local banks, but in more developed markets this fall is lower because the entering bank does not have such a high competitive advantage as in less developed countries.

Table 3 Foreign banks entry (FBSN) effects: role of the banking market development

Variable	D(ALINT)	D(PTPTA)	D(OOITA)	D(OHTA)	D(LLPTA)
LD(DEP)	0.0165 (0.0220)	0.1916 (0.1302)	0.0450 (0.1183)	0.3229 (0.2899)	0.2013* (0.1095)
D(FBSN)	-0.2293*** (0.0820)	0.0617 (0.0790)	0.3104 (0.2312)	0.3382* (0.2036)	-0.0388 (0.0845)
D(FBSN* DCGDP)	0.3620** (0.1768)	-0.2922* (0.1644)	-1.2258** (0.5979)	-1.1266* (0.6814)	-0.1072 (0.1862)
D(NEATA)	0.1008* (0.0609)	0.0408 (0.0413)	0.5233* (0.3022)	0.4417 (0.3260)	-0.0251 (0.0786)
D(ETA)	-0.1497 (0.1008)	0.3929*** (0.1316)	-0.0455 (0.3722)	-0.2406 (0.3540)	0.0091 (0.0972)
D(CSTFTA)	-0.0233 (0.0341)	0.0535 (0.0371)	0.1394 (0.0892)	0.0075 (0.0757)	0.0491 (0.0414)
D(MSHARE)	0.1581 (0.1731)	0.2099** (0.1043)	-0.5791** (0.2922)	-0.6052* (0.3291)	-0.1727* (0.1021)
FD	0.0083 (0.0146)	-0.0345 (0.0291)	0.0094 (0.0609)	0.0362 (0.0699)	0.0253 (0.0225)
D(DCGDP)	-0.1552** (0.0751)	0.1395 (0.0858)	0.8693*** (0.3375)	0.8543* (0.5093)	0.1952* (0.0925)
D(GGDP)	-0.4254*** (0.1514)	-0.0146 (0.1196)	-0.3061** (0.1466)	-0.4932** (0.2479)	-0.0561 (0.1268)
D(LNIN- COME)	0.0191 (0.0463)	-0.0013 (0.0468)	-0.2621** (0.1269)	-0.2606* (0.1431)	-0.0610 (0.0518)
D(CPI)	-0.0063 (0.0041)	0.0067 (0.0042)	0.0404 (0.0287)	0.0164 (0.0277)	0.0033* (0.0018)
D(MMR)	0.0702* (0.0402)	-	-	-	-
Nr. Obs	1036	1041	1035	1021	895
F-Statistic	4.02	2.97	1.85	1.2	2.63

Source: author's calculations. Note: * – significant at 10% level, ** – significant at 5% level, *** – significant at 1% level.

The development of the banking market has also some effect on banks' overhead costs. The results indicate that in countries with a lower level of financial sector development, foreign entry is more related with higher overhead costs, but for countries with a higher level of financial sector development, foreign entry causes less and less extra costs for banks because the banking system is already developed and fewer additional investments are needed to upgrade the banking equipment.

The results show that foreign banks entry reduces non-interest incomes of the local banks, but the coefficient may turn positive in more developed markets, where competition is more intense. One reason for the limited role of the banking sector development on foreign entry effects can be the homogenous sample of countries.

Generally, lags of difference of dependent variables do not have statistically significant coefficients. From among other explanatory variables, the ratio of bank equity to total assets is positively correlated with bank profits.

Next, the interactive term with foreign banks entry variable and a bank's market share is introduced. It can be expected that small banks react to foreign banks entry somewhat differently from big banks. Obviously, banks having a bigger market share react less to foreign banks entry. This can be so because firstly, they are too big to react so quickly and secondly, banks with high market shares may care less about foreign entry, because it affects them less than small banks.

The estimation results in Table 5 show that the role of the bank's market share in foreign entry effects is very limited. The interactive term $FBSN * MSHARE$ has a statistically significant negative effect on non-interest income and loan loss provisions. Bigger banks tend to have lower loss provisions, indicating that they have comparably more creditworthy clients and/or a better credit risk policy. No significant coefficients for $FSA * MSHARE$ was found, therefore those results are not reported.

Table 4 Foreign banks entry (FSA) effects: role of the banking market development

Variable	D(ALINT)	D(PTPTA)	D(OOITA)	D(OHTA)	D(LLPTA)
LD(DEP)	0.0160 (0.0220)	0.1805 (0.1264)	0.1391 (0.1446)	0.4027 (0.3073)	0.2184** (0.1117)
D(FSA)	0.0651* (0.0347)	-0.1366*** (0.0387)	-0.3075** (0.1248)	-0.2444 (0.1864)	-0.0235 (0.0409)
D(FSA*)	-0.3371*** (0.1066)	0.3512*** (0.1135)	1.0882** (0.4342)	0.9311 (0.6640)	0.1476 (0.1287)
DCGDP	0.1103* (0.0588)	0.0382 (0.0414)	0.5074 (0.3104)	0.4342 (0.3474)	-0.0266 (0.0779)
D(ETA)	-0.1665 (0.1036)	0.3948*** (0.1309)	-0.0314 (0.3819)	-0.2306 (0.3653)	0.0114 (0.0960)
D(CSTFTA)	-0.0282 (0.0314)	0.0492 (0.0368)	0.1318 (0.0914)	-0.0064 (0.0820)	0.0469 (0.0402)
D(MSHARE)	0.2130 (0.1696)	0.2043* (0.1106)	-0.6698** (0.3350)	-0.6962* (0.3746)	-0.1838* (0.0989)
FD	0.0109 (0.0167)	-0.0286 (0.0376)	0.0019 (0.0389)	0.0301 (0.0564)	0.0144 (0.0166)
D(DCGDP)	0.1894*** (0.0738)	-0.1690*** (0.0569)	-0.1452** (0.1361)	-0.0507 (0.1324)	0.0989 (0.0539)
D(GGDP)	-0.4151*** (0.1570)	-0.0095 (0.1121)	-0.3574 (0.1718)	-0.4927** (0.2740)	-0.0690 (0.1094)
D(LNIN-COME)	-0.0017 (0.0450)	0.0530 (0.0491)	-0.1173 (0.0771)	-0.1498* (0.0752)	-0.0476 (0.0459)
D(CPI)	-0.0057* (0.0034)	0.0071* (0.0043)	0.0376 (0.0280)	0.0136 (0.0288)	0.0044** (0.0022)
D(MMR)	0.1173*** (0.0433)	-	-	-	-
Nr. Obs	1023	1028	1022	1009	884
F-Statistic	4.53	3.93	1.32	1.36	3.00

Source: author's calculations. Note: * – significant at 10% level, ** – significant at 5% level, *** – significant at 1% level.

Table 5 Foreign banks entry (FBSN) and bank performance: role of a bank's market share

Variable	D(ALINT)	D(PTPTA)	D(OOITA)	D(OHTA)	D(LLPTA)
LD(DEP)	0.0184 (0.0238)	0.1876 (0.1299)	0.0307 (0.0989)	0.3429 (0.2916)	0.2015* (0.1079)
D(FBSN)	-0.1171*** (0.0415)	-0.0103 (0.0419)	-0.1275** (0.0642)	-0.0816 (0.0822)	-0.1008** (0.0426)
D(FBSN* MSHARE)	-0.1664 (0.2358)	-0.2505 (0.1551)	1.1796* (0.6216)	1.3582 (0.9280)	0.4665*** (0.1414)
D(NEATA)	0.1103* (0.0601)	0.0348 (0.0413)	0.5029* (0.2977)	0.4302 (0.3335)	-0.0236 (0.0760)
D(ETA)	-0.1542 (0.1026)	0.3968*** (0.1310)	-0.0243 (0.3582)	-0.2209 (0.3504)	0.0103 (0.0961)
D(CSTFTA)	-0.0253 (0.0346)	0.0534 (0.0371)	0.1482* (0.0885)	0.0148 (0.0760)	0.0517 (0.0413)
D(MSHARE)	0.2071 (0.2053)	0.2526** (0.1083)	-0.8549** (0.4245)	-0.9185* (0.5143)	-0.2989** (0.1204)
FD	0.0162 (0.0110)	-0.0246 (0.0262)	-0.0401 (0.0380)	-0.0245 (0.0315)	0.0084 (0.0134)
D(DCGDP)	-0.0259 (0.0290)	0.0561 (0.0506)	0.5178*** (0.1736)	0.5461* (0.3270)	0.1717*** (0.0606)
D(GGDP)	-0.4653*** (0.1693)	-0.0080 (0.1194)	-0.3201** (0.1529)	-0.5040* (0.2648)	-0.0542 (0.1203)
D(LNINCO ME)	0.0051 (0.0447)	-0.0054 (0.0488)	-0.2790** (0.1318)	-0.2819* (0.1527)	-0.0721 (0.0521)
D(CPI)	-0.0036 (0.0033)	0.0052 (0.0043)	0.0339 (0.0265)	0.0096 (0.0258)	0.0024 (0.0018)
D(MMR)	0.0335 (0.0484)	-	-	-	-
Nr. Obs	1036	1041	1035	1021	895
F-Statistic	4.27	3.87	2.1	1.24	2.59

Source: author's calculations. Note: * – significant at 10% level, ** – significant at 5% level, *** – significant at 1% level.

A summary of results and comparison with other studies is given in Table 6. The results are consistent with earlier studies, having, however, some differences. It can be generalised that foreign banks entry is negatively correlated with the income variables (ALINT, PTPTA and OOITA) and foreign banks entry is also negatively associated with loan loss provisions. Overhead costs are positively correlated with FBSN, but the increase is less important for countries with higher DCGDP, therefore the results support the technology gap hypothesis. Hermes and Lensink (2002, 2003) and Zajc (2004) have also found positive and significant effects of foreign banks entry on overhead costs. In most studies, foreign banks entry is negatively correlated with non-interest income; Hermes and Lensink (2003) found positive and significant correlation between foreign banks entry and non-interest income.

Table 6 Summary of the results and comparison with earlier studies

	Model	Net int. margin; ALINT	Non-interest income	Before tax profit	Overhead expenses	Loan loss provisions
Results	FBSN	–	NS	NS	NS	–
	FSA	–	NS	NS	NS	+
	FBSN	–	NS	NS	+	NS
	FBSN*DCGDP	+			–	
	FSA	+	–	–	NS	NS
	FSA*DCGDP	–	+	+		
	FBSN	NS	–	NS	NS	–
	FBSN*MSHARE		+			+
	FSA	NS	NS	NS	NS	NS
	FSA*MSHARE					
Claessens et al. (2001)	FBSN	NS	–	–	–	NS
	FSA	NS	NS	NS	NS	NS
Hermes and Lensink (2003a)	FBSN	+	+	–	+	+
	FBSN*DCGDP	–	–	+	–	–
Hermes and Lensink (2003b)	FBSN	+	+	–	+	+
	FBSN*GDPPC	–	–	+	–	–
	FSA	+	+	–	+	+
	FSA*GDPPC	–	–	NS	NS	–
Zajc (2004)	FBSN	NS	–	–	+	NS
	FSA	–	–	–	+	NS

Note: + indicates a significant positive correlation

– indicates a significant negative correlation

NS indicates a relationship that is not statistically significant

Source: Author, Claessens et al. (2001), Hermes and Lensink (2003 a,b), Zajc (2004)

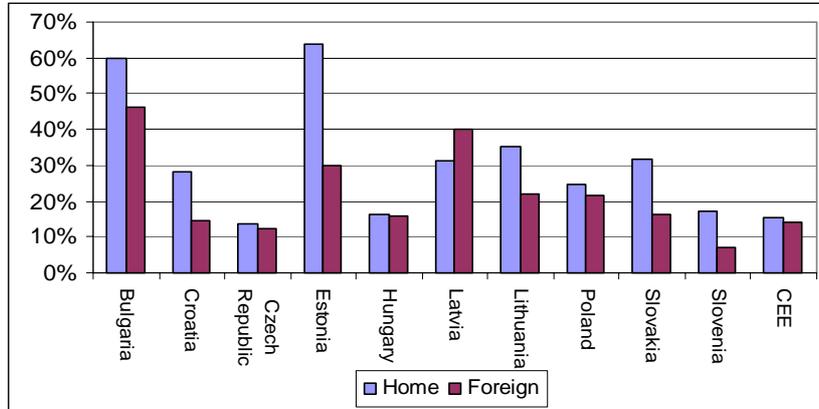
4. Effect of foreign bank entry on the stability of banks in the CEE countries

4.1 The stability of credit growth

One of the main issues of banking market development in transition countries is the level of financial intermediation and the credit to private sector. Despite the rapid growth of banking markets in transition countries, the level of the financial intermediation remains relatively low, compared with Euro area, where the average bank credit to private sector to GDP ratio is about 150% (ECB 2002).

To analyse, whether foreign banks have more stable credit supply growth in the CEE countries, the mean values and standard deviations of the credit growth in each country were calculated. The credit growth is calculated based on bank level data from Bankscope database. Bank market shares are used as weights to calculate the average credit supply growth. The standard deviation of credit growth of foreign and domestic banks in 1995 to 2003 is given in Figure 2. The volatility of credit growth among foreign and domestic banks has been quite equal. The average standard deviation of the credit supply growth in the CEE countries for domestic banks is 0.15 and 0.14 for foreign banks respectively. Nevertheless Figure 2 shows that in majority of the CEE countries the volatility of credit supply is lower than in domestic banks.

Figure 2. The standard deviation of credit growth in the CEE countries.



Source: Bankscope 2005, author's calculations

The conclusion from this section is that foreign banks have contributed to the stability of credit supply in the CEE countries during crises, although the differences of credit supply volatility are not very big and

further studies are required to get deeper understanding of about the effects of foreign banks entry on the credit market stability.

4.2 Effect of foreign entry on the quality of loan portfolios

As the analysis showed in section 3, more detailed analysis of foreign banks' entry effect on loan losses of local banks is required, as the results were not stable. Therefore the regressions are recalculated. In the final version of regressions, the only significant bank level independent variable in the regressions is bank market share, $D(\text{MSHARE})$. The accounting variables did not have statistically significant effect on the dependent variable $D(\text{LLPTA})$. This result indicates, that accounting variables do not reflect the credit risk of a bank.

The estimation results in column A (Table 7) indicate that foreign bank entry in terms of number of foreign banks on the market has negative effect on banks' loan loss provisions to total assets. This result is similar to Weller (2000), who showed that in presence of foreign banks' entry, local banks may reduce credit by more strict credit conditions to firms because of comparatively weak financial situation and fear of bankruptcy. The negative relationship between foreign bank entry and banks loan loss provisions can be also interpreted as a positive effect of foreign bank entry on banking market stability.

In column B, the regression results with combination of foreign entry and bank market share ($D(\text{FBSN}*\text{MSHARE})$) is introduced. The regression estimation shows that banks with higher market share have less loan loss provisions to total assets and react less on foreign bank entry. This can be concluded from column B, where the regression coefficient for ($D(\text{FBSN}*\text{MSHARE})$) is positive but the regression coefficients for $D(\text{FBSN})$ and for $D(\text{MSHARE})$ are negative.

Foreign bank entry variable $D(\text{FSA})$ does not have statistically significant effect on banks loan loss provisions in the regressions. The results are reported in column C. The results in column D show that generally domestic banks react similarly to foreign entry as does the full sample. The most significant difference is that the regression coefficient of MSHARE in column D is -0.449 , while it is -0.11 in the regression presented in column A. This result indicates that for domestic banks their market share (also size) is an important factor of loan losses. Bigger domestic banks have lower loan loss provisions, i.e. their loan portfolio quality is higher.

Table 7 Effect of foreign banks' entry on loan loss provisions of banks

Variable	D(LLPTA) (A)	D(LLPTA) (B)	D(LLPTA) (C)	D(LLPTA) (D)
LD(DEP)	0.159*** (5.59)	0.156*** (5.47)	0.171*** (5.93)	0.1578*** (4.18)
D(FBSN)	-0.076*** (-3.53)	-0.095*** (-4.15)		-0.150*** (-4.00)
D(FSA)			0.018 (1.33)	
D(FBSN* MSHARE)		0.305** (2.11)		
D(MSHARE)	-0.111* (-1.68)	-0.188** (-2.38)	-0.107 (1.60)	-0.449*** (-2.54)
D(DCGDP)	0.184*** (4.30)	0.184*** (4.32)	0.213*** (5.08)	0.2470*** (2.99)
D(CONC)	0.057* (1.80)	0.052* (1.63)	0.039 (1.16)	0.06652 (1.28)
C	0.005 (1.52)	0.003 (1.55)	(-0.003)*** (-2.85)	0.0059* (1.86)
No. of obs.	897	897	886	469
F-Statistic	15.9	14.4	14.69	9.90
Wald Chi2	95.47	100.45	88.13	59.43

Notes: *t* – statistics are in parentheses; * – significant at 10% level, ** – significant at 5% level, *** – significant at 1% level.

Source: authors' calculations.

The regression coefficient for D(DCGDP) is positive in all regressions, indicating, that higher private sector credit is associated with higher loan loss provisions to total assets of banks. The interpretation of this result can be twofold. If we take DCGDP as the indicator of banking market development, like in Hermes and Lensink (2003), then the interpretation would be that are higher average loan loss provisions to total assets of banks in countries with higher banking market development. Another interpretation is that in transitions countries with higher private sector dept to GDP, there are higher average loan loss provisions to total assets of banks.

The result show that banking market concentration D(CONC) is positively associated with banks loan loss provisions to total assets. The economic intuition behind this result is that if there is a high concentration on the market, then there some big banks and other banks are comparatively small and smaller banks have less diversified credit portfolio and higher share of loan loss provisions. Another interpretation for transition countries, where major banks are foreign owned could be, that big foreign banks “cream skim”, focusing on bigger less risky firms and leaving more risky credit projects to smaller domestic banks.

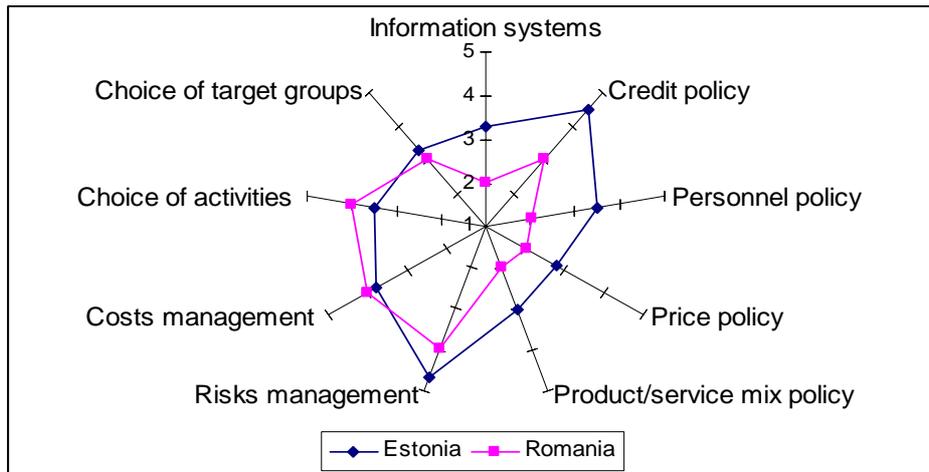
The general conclusion of this section is that foreign bank entry tends to be negatively associated with banks loan loss provisions, indicating that foreign bank entry is contributing to banking market stability of transition countries.

5 Results of the survey

In order to analyze the effect of foreign banks' entry into the CEE countries a survey was carried out. A special questionnaire was designed to study various aspects of banks' internationalization in the CEE countries using the experience and lessons of previous analogous studies (see Konopielko (1999); Kraft and Galac (2000); Pomerleano and Vojta (2001)). A survey of foreign and domestic banks was carried out in 2001–2002 in Estonia, Lithuania, Poland, and Romania; some comparative data were available also from an analogous Croatian (CR) study (Kraft and Galac, 2000).

The transfer of various know-how from foreign banks has been important, especially for foreign-owned banks' management (see Figure 3). The transferred know-how about interest rates, solvency and credit risks management techniques was evaluated by respondents most highly (over 4.0 points by Estonian foreign banks' respondents). Liquidity risk management techniques, information systems, credit policy and personnel policy transfer from foreign banks was also evaluated quite highly by Estonian domestic banks. On the other hand, the average grades given by the responding Polish domestic banks were somewhat different: the transfers of information systems and banking services/products mix policy were considered as the most important know-how transfers from foreign banks (4.3 and 4.2 grades, respectively). This difference between Estonia and Poland can be explained by the technology gap argument. Electronic banking and up-to-date computer technology are considered to be at a much higher level in Estonia than in the other CEE countries and therefore additional know-how transfer from mother banks has not been so relevant. It is even argued that the Estonian e-banking system is more advanced than the corresponding systems in many developed EU countries.

Figure 3 Evaluations of the adoption of mother bank's policies and systems

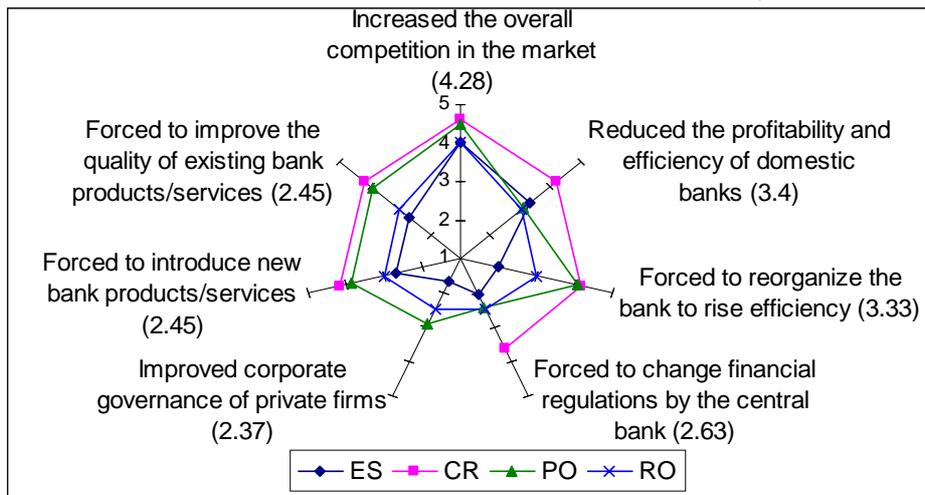


Source: author's figure

The impact of foreign banks' entry into the observed CEE banking markets (as evaluated by the responding domestic banks) is presented in Figure 4.

The results show that foreign banks' entry significantly intensified the overall competition in the banking market (average grade 4.0 points in Estonia and Romania, 4.5 in Poland), reducing the domestic banks' profitability and efficiency of operation. All other impacts were evaluated by Estonian respondents as unimportant, among them, surprisingly, even corporate governance of private firms (average grade only 1.7 points).

Figure 4 Impact of foreign banks' entry into the host country's market (ES – Estonia, CR – Croatia, PO – Poland, RO – Romania)



Source: author's figure.

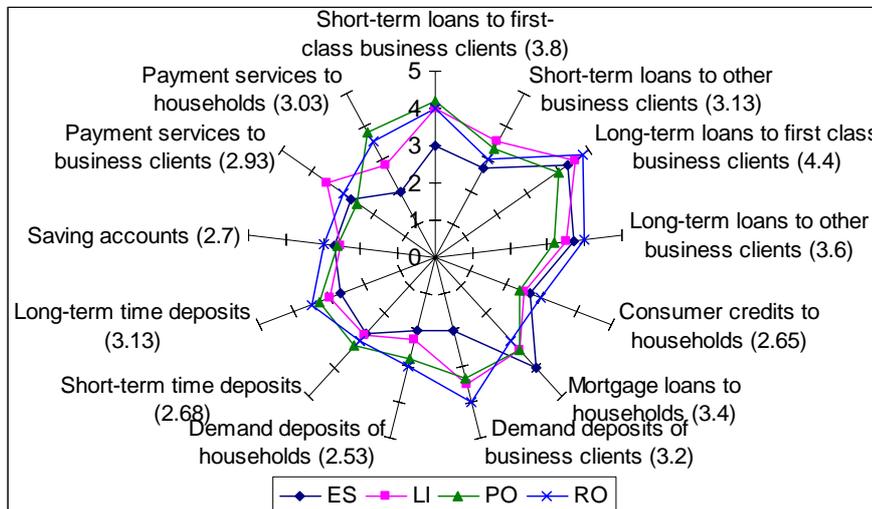
Polish respondents were of the opinion that foreign banks' entry significantly forced banks to reorganize their internal structure in order to raise efficiency (4.1 points), as well as to introduce new banking services/products and improve the quality of the existing banking products and services (both 3.9 points). It is quite interesting that the Croatian respondents evaluated the impact of foreign banks' entry into the Croatian banking market more highly than the respondents from other countries.

It is interesting to note that the average effects of foreign banks' entry were clearly different in different countries. It can be seen in Figure 4 that the importance of different impacts of foreign entry in descending order is as follows: Croatia, Poland, Romania and finally Estonia. Seemingly, the general effect of foreign banks depends on market-specific factors. The Estonian banking market is comparatively more highly developed and so the overall effect of foreign banks has been evaluated to be lower. Therefore, the technology gap hypothesis seems to hold.

The responding domestic banks' evaluations about the degree of competitive pressure resulting from foreign banks' entry are given in Figure 5. Quite clearly, here long-term loans to first-class business clients (average grade 4.4 points) dominated among the other market segments. Mortgage loans to households (average grade 4.0 points) were mentioned as the most important market segments on the Estonian banking market that were influenced by the pressure from foreign banks. The Lithuanian, Polish and Romanian respondents' evaluations were somewhat different: short-term

loans to first-class business clients were mentioned as the more important competitive market segment (average grades respectively 4.0, 4.2 and 4.0 points). The Romanian respondents ranked highly also long-term loans to other business clients and demand deposits of business clients.

Figure 5 The degree of competitive pressure from foreign banks (ES – Estonia, LI – Lithuania, PO – Poland, RO – Romania)



Source: author's figure.

6 Conclusions

This paper tries to shed light to some aspects of foreign banks entry in the CEE countries. The author suggests that foreign banks' entry can have both competition and spillover effect on domestic banking sector in the CEE countries.

The negative competition effects of foreign banks' entry were weaker in those countries whose banking market was more advanced, indicating that the technology gap hypothesis holds in the CEE banking markets. The entry of foreign banks was positively correlated with the quality of loan portfolios of local banks. This result indicates that there is a positive competition effect of foreign banks' entry also on the stability of domestic banks. Additionally, there were some positive spillover effects of know-how transfer to local banks. The survey results indicate that the main technology spillover from foreign to domestic banks has been in the field of risk management. Therefore there is also a positive spillover effect on the stability of domestic banks. The general conclusion of the paper is that foreign banks entry is

likely to have positive effect to transition banking markets by increasing competition and stability of the banking sector.

References

- [1] AITKEN, B. J., HARRISON, A. E. Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela, *American Economic Review*, Vol. 89, No 3, 1999, pp. 605–618.
- [2] ARELLANO, M., BOND, S. Some Tests of Specification for Panel Data: Monte-Carlo Evidence and an Application to Employment Equations. *The Review of Economic Studies*, Vol 58, No 2, 1991, pp. 277-297.
- [3] BankScope, Fitch-IBCA & Bureau van Dijk , January 2005
- [4] BONIN, J., ÁBEL, I. *Retail Banking in Hungary: A Foreign Affair?* Working Paper, Hungarian National Bank, No 356, 2000, 53 pp.
- [5] BORENSZTEIN, E., DE GREGORIO, J., LEE, J.W. How Does Foreign Direct Investment Affect Economic Growth? *Journal of International Economics*, Vol. 45, 1998, pp. 115–135.
- [6] CÁRDENAS, J., GRAF, J. P., O'DOGHERTY, P. *Foreign banks entry in emerging market economies: a host country perspective*, 2003, 29 p. [<http://www.bis.org/publ/cgfs22mexico.pdf>]
- [7] CLAESSENS, S., DEMIRGUC-KUNT, A. AND HUIZINGA, H. How Does Foreign Entry Affect Domestic Banking Markets? *Journal of Banking and Finance*, 25, 5, 2001, pp. 891-911.
- [8] CLARKE, G., CRIVELLY, J. M., CULL, R. The direct and indirect impact of bank privatization and foreign entry on access to credit in Argentina's provinces. *Journal of Banking and Finance*, 2004, 25 p.
- [9] DEMIRGUC-KUNT, A., LEVINE, R. AND MIN, H.C. *Opening to Foreign Banks. Issues of Stability, Efficiency, and Growth*. In: Seongtae Lee (ed.) *The Implications of Globalization of World Financial Markets*. Bank of Korea, Seoul, 1998.
- [10] Financial Structure and Economic Development Database, Worldbank, [<http://www.worldbank.org/research/projects/Finstructure/database.htm>] 12.12.2004.
- [11] European Bank for Reconstruction and Development, Transition Report 2002: Agriculture and rural development.
- [12] European Bank for Reconstruction and Development, Transition Report 2003: Integration and regional cooperation.
- [13] European Central Bank: Financial Sectors in EU Accession Countries, ed. Thimann, C., 2002, 234p.

- [14] GLASS, A. J., SAGGI, K. International technology transfer and the technology gap. *Journal of Development Economics*, 55, 1998, pp. 369-398.
- [15] HERMES, N., LENSINK, R. *Foreign bank presence, domestic bank performance and financial development*. Paper for SUERF colloquium, 2003, 23 p.
- [16] HERMES, N., LENSINK, R. *The impact of foreign bank entry on domestic banks in less developed countries: an econometric analysis*. In: *Foreign Banks and Economic Transition*, Poznań University of Economics, Working Papers, No 20, 2002, pp. 129-147.
- [17] HERRERO, A. G., SIMÓN, D. N. *Determinants and impact of financial sector FDI to emerging economies: a home country's perspective*, 2003, 26 p. [<http://www.bis.org/publ/cgfs22bde2.pdf>], 11.03.2005
- [18] International Monetary Fund. *International Financial Statistics Yearbook 2002*.
- [19] International Monetary Fund. *International Financial Statistics Yearbook 2003*.
- [20] KOKKO, A. Technology, Market Characteristics and Spillovers. *Journal of Development Economics*, Vol. 43, 1994, pp. 279–293.
- [21] KONINGS, J. *The Effect of Direct Foreign Investment on Domestic Firms: Evidence from Firm Level Panel Data in Emerging Economies*, CEPR, 19 p., 1999, mimeo.
- [22] KONOPIELKO, L. Foreign Banks' Entry into Central and East European Markets: Motives and Activities. *Post-Communist Economies*, 11, 4, 1999, pp. 463–485.
- [23] KRAFT, E. and GALAC, T. *The Impact of Foreign Banks on the Croatian Banking Market*. Paper presented at the 6th European Association of Comparative Economic Systems, Barcelona, September 7–9, 2000.
- [24] MATHIESON, D. J. and ROLDOS, J. *The Role of Foreign Banks in Emerging Markets*. Paper presented at the World Bank, IMF, and Brookings Institution 3rd Annual Financial Markets and Development Conference, 2001.
- [25] MCKINNON, R.I. *Money and Capital in Economic Development*, Washington DC. The Brookings Institution, 1973.
- [26] PETIT, M.L., SANNA-RANDACCIO, F. Endogenous R&D and foreign direct investment in international oligopolies. *International Journal of Industrial Organization*, 18, 2000, pp 339–367.
- [27] POMERLEANO, M., VOJTA, G.J. *What Do Foreign Banks Do in Emerging Markets? An Institutional Study*. Paper presented at the World Bank, IMF, and Brookings Institution 3rd Annual Financial

Markets and Development Conference, 19–21 April 2001, New York, 51 p.

- [28] SHAW, E. *Financial Deepening in Economic Development*, New York, Oxford University Press, 1973.
- [29] Stata Cross-Sectional Time-Series. Reference Manual, Release 8, A Stata Press Publication, 2003, 242 p.
- [30] TEECE, D.J. Technology Transfer by Multinational Firms: The Resource Cost of Transferring Technological Know-How, *Economic Journal*, June, Vol. 87 (346), 1977, pp. 242–61.
- [31] WELLER, C. E. Financial Liberalization, Multinational Banks and Credit Supply: The Case of Poland. *International Review of Applied Economics*, 14, 2, 2000, pp. 193-211.
- [32] ZAJC, P. *The effect of foreign bank entry on domestic banks in Central and Eastern Europe*, In Balling, M., Lierman, F., Mullineux, A, Eds, *Financial markets in Central and Eastern Europe*, Routledge, 2004, pp. 189–206.

Appendix 1

List of variables used in the analysis

Variable	Source	Description
FBSN	Central banks, EBRD	Number of foreign banks as percentage of all banks in a given country and year
FSA	BankScope	Share of foreign banks' assets in total banking market assets in a given country and year
FD	BankScope, bank web sites	Dummy variable with value 1 if bank is foreign-owned and 0 for domestic bank
NIM	BankScope	Net interest income (interest income minus interest expense) over total assets
ALINT	BankScope	Interest income to interest earning assets
PTPTA	BankScope	Before tax profit over total assets
OOITA	BankScope	Non-interest income over total assets
OHTA	BankScope	Total operating expenses (all but interest expenses) over total assets
LLPTA	BankScope	Loan loss provisions over total assets
ETA	BankScope	Equity over total assets
NEATA	BankScope	Non-interest earning assets over total assets
CSTFTA	BankScope	Short- and long-term deposits, and other non-deposit short-term funding over total assets
MSHARE	BankScope	Bank assets to total banking market assets in a given year
GGDP	EBRD	Real GDP annual growth rate
INCOME	EBRD	GDP per capita in US dollars
CPI	EBRD	Annual CPI change
MMR	IFS	End of year money market interest rate
DCGDP	IFS	Private credit to the GDP in a given country and year

Note: all variables are in percentages except GDP per capita (in US dollars (th.), 1995 prices)

Source: Central banks' home pages, EBRD Transition Report 2002, Fitch IBCA's BankScope database, Asly Demirgüç-Kunt, Financial Structure and Economic Development Database, Worldbank, [<http://www.worldbank.org/research/projects/Finstructure/database.htm>]; International Monetary Fund. International Financial Statistics Yearbook 2002.

BANKING AND FINANCIAL LIBERALISATION: DO FOREIGN BANKS CONTRIBUTE TO GROWTH?¹

Peter Haiss
EuropeInstitute,
Vienna University of Economics
and Business Administration
Althanstrasse 39-45
1090 Vienna, Austria
peter.haiss@wu-wien.ac.at
phone ++43 (0) 664 812 29 90

Milena Staeva
EuropeInstitute,
Vienna University of Economics
and Business Administration
Gentzgasse 27/322
1180 Vienna, Austria
milena.staeva@gmx.net
phone ++43 (0) 676 711 10 07

Abstract

Foreign banks' presence in Central and Eastern Europe has reached a level way above other emerging and EU markets. What is the long-term impact of this special situation on economic growth and stability? Through which channels do foreign banks influence a host country's economy? What are the lessons for other regions? The purpose of this paper is (1) to discuss the challenges that the banking industry in CEE countries was faced with through the massive entry of foreign banks; (2) to describe how this industry has developed under the conditions of increased foreign ownership; (3) to delineate the impact on GDP growth. We find that via direct (price, volume and institutional) and indirect channels (e.g. signalling), foreign banks can contribute positively to financial sector development and economic growth if they follow a prudent, long-term regional strategy.

Keywords: *financial liberalization; foreign banks; financial development; economic growth*

¹ Peter R. Haiss is a lecturer at the EuropeInstitute, Vienna University of Economics and Business Administration and manager with the Corporate and Project Finance Austria Department of Bank Austria Creditanstalt, Vienna, Austria. Milena Staeva is a graduate student at the Vienna University of Economics and Business Administration. The opinions expressed are the authors' personal views and not necessarily those of the institutions the authors are affiliated with. The authors are indebted to Gerhard Fink, Markus Eller and Katharina Steiner of the EuropeInstitute and Svetlana Peytcheva, Department of Process-oriented Economics, all of the Vienna University of Economics and Business Administration for their comments on earlier versions. The authors gratefully acknowledge the support granted by the Jubiläumsfonds of the Oesterreichische Nationalbank (project No. 8868).

1. Introduction

During the 1990s, one of the most striking structural changes in the financial systems in Central and Eastern Europe (CEE)² has been the growing presence of foreign banks. Their entry into the financial structures of these countries significantly altered the business potential in the banking sector, shaped its environment and the development of the aggregate financial system. Beyond the short-term, direct implications: what is the long-term outcome of massive foreign bank entry onto economic growth and stability? Did foreign bank entry accelerate economic development and growth in CEE countries, and if so, how? Given that more than half of the total number of banks in the CEE region are foreign owned now, exceeding the level in comparable emerging markets, the role foreign banks play in CEE countries and their importance for the economic and financial development of these countries is an important issue both for domestic development and beyond.

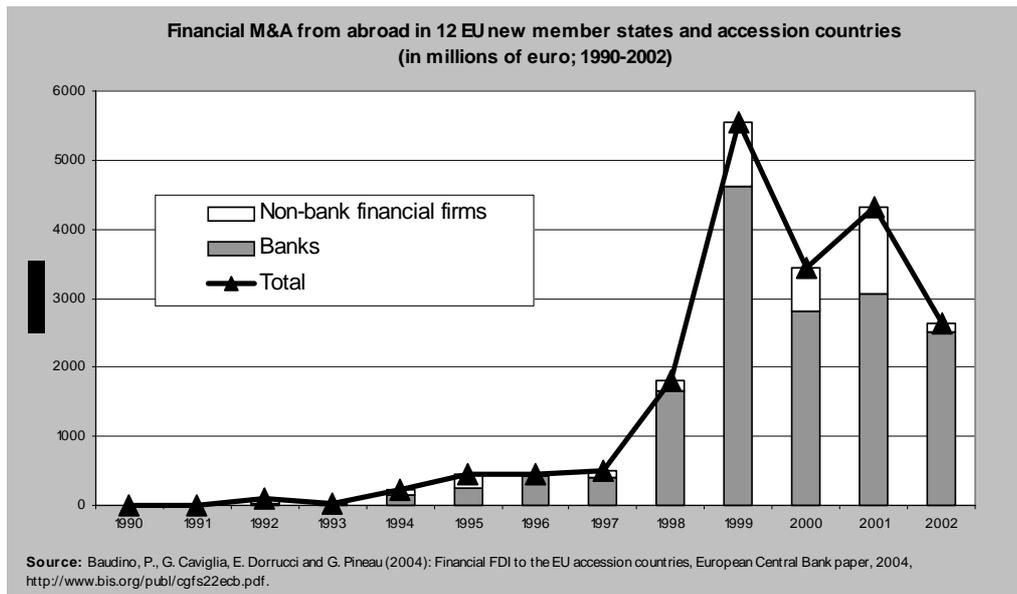
The aim of this paper is to discuss various channels of influence of foreign bank entry onto the host country financial sector and whether or not this special situation favours economic growth. We begin with a brief characteristic of the banking market of CEE countries, dominated by foreign banks – foreign banks concentration, services offered, their efficiency. Then we analyse the effects that foreign banks have on the development of the financial sector of these countries – starting with the stability, efficiency and improved competition that they provide in the banking sector, and also their influence on domestic banks behaviour and performance. Next we examine if there is any relationship between financial development (affected positively by foreign financial intermediation) and economic development and growth. At the end we present the results of two studies analysing the financing of small and medium enterprises and the role of foreign banks by serving the private and public sector. We conclude that foreign banks with a long-term orientation towards the region contribute positively to economic development of their CEE host countries both directly and indirectly. They directly promote efficiency in the financial sector and provide more stable sources of credit. Together with technology transfer and improved corporate governance, this spills over into attracting further foreign direct and portfolio investment and jointly leads to improved economic growth.

² As foreign bank presence only recently gained in importance in South-Eastern Europe, we focus on the New EU Member States and EU Accession Countries from CEE in the following.

2. Foreign banks in CEE

Foreign banks have been active in CEE countries since the early 1990s when many of these countries implemented financial liberalisation policies and eliminated entry barriers allowing foreign banks to set up subsidiaries or to privatise domestic banks. In recent years, progress has been particularly significant in restructuring and consolidating the banking sector. All this has led to a rapid increase of foreign ownership in the banking industry in the second half of the 1990s (Roldos, 2001).

Figure 1 Financial M&A from abroad in 12 EU new member states and accession countries (in millions of euro; 1990-2002)



Source: Haiss/Steiner/Eller, 2005

As CEE countries differ in their economic and banking market development, foreign banks entered these countries to different degrees. Hasan and Marton (2003) mention Hungary as a leader in inviting foreign banking institutions during the late 1980s and that within a short period of time the foreign banking sector has become a dominant force in the industry as well as in the economy.

2.1 Concentration of foreign banks in CEE markets

Today foreign banks account for more than half of the total number of banks in CEE, and hold more than two thirds of total bank assets (Uiboupin, 2004, 7) and at least three out of the top five banks are foreign-owned

(Baudino/Caviglia/Corrucci/Pineau, 2004, 19). Still, foreign bank presence in these countries is considerably higher than in the old member countries of the European Union. With the exception of Slovenia and Latvia, the banking sector in the New EU Member States (NMS) and the EU Candidate Countries (Croatia, Bulgaria, and Romania) is dominated by foreign banks. In the Czech Republic, Slovakia, Estonia, Lithuania, Croatia and Bulgaria, foreign banks own more than 80 per cent of the banking market. Although the CEE banking market is relatively small with total assets of some EUR 350 billion in absolute terms (by comparison, total assets of banks operating in Austria were some EUR 605 billion at the end of 2003), it is nevertheless a growth market. As Breyer (2004) argues, this above-average growth potential and the higher interest margins than in Western Europe have led Western European banks to invest heavily in the CEE banking sector. In addition to higher economic growth, the low degree of bank intermediation (about a third relative to its Western European equivalent) suggests continuing strong growth potential for banks in CEE in the coming years (Breyer, 2004).

Foreign involvement, though important, is not evenly spread across the CEE region. According to Bonin, Hasan and Wachtel (2005, 32), the foreign share in bank assets in CEE countries in 2000 ranged from highs of 97.4% in Estonia and 84.1% in Croatia to a low of 15.6% in Slovenia. Slovenia has the least amount of foreign participation but the highest relative measures of financial depth, deposit collection, and bank lending (Bonin 2004, 143). In Slovakia and Romania, 42.7% and 46.7% of assets are in banks having majority foreign ownership and in the other CEE countries more than half of the assets are in banks having majority foreign ownership (Bonin/Hasan/Wachtel, 2005, 32). At the same time there is a very small involvement of foreign banks in CIS countries, and especially in Russia (Svetlov, 2002).

Baudino, Caviglia, Corrucci and Pineau (2004, 25) examine the concentration and involvement of EU banking groups in CEE. They find that large Austrian banks are very active in the Eastern expansion - due to several reasons, including the strategic interest of Austria vis-à-vis the so-called Visegrad countries (Czech Republic, Hungary, Poland and Slovakia) and other neighbouring markets. Austrian banks have been among the first participants in the privatisation of the CEE banks and their involvement goes beyond being a by-product of Austria's strong trade relations with many of the New EU Member States. Proximity and early-mover-advantages may play a major role in this regional market approach. Further north, the largest Swedish and Finnish banks found the ground for natural expansion in the Baltic countries. Greek banks concentrated on South-Eastern Europe (SEE), Italian banks followed an active international strategy towards the whole

Central and Eastern Europe (Baudino/Caviglia/Corrucci/Pineau, 2004, 25), with a high degree of involvement also in neighbouring markets. A significant number of foreign banks active in CEE markets hail from Europe's smaller markets, where the prospects for domestic growth are limited. This applies to the three Austrian players (Erste Bank, Bank Austria Creditanstalt and Raiffeisen Zentralbank), the two Benelux players (KBC and ING) and Portugal's Banca Comercial Portuguesa (European Banker, 2004).

2.2 Services offered by foreign banks in CEE

In CEE countries due to the small size of the respective financial markets, foreign banks seem to have a preference for developing retail banking rather than wholesale activity. In 2001 retail (32%) and commercial banking (34%) were the most developed business lines (Baudino/Caviglia/Corrucci/Pineau, 2004, 30). Conversely, corporate finance, trading and asset management accounts for altogether, only 28% (9.8%, 11.2% and 7% respectively) of the overall business and other banking activities like agency services and retail brokerage are hardly being developed. However, there are significant differences across countries. Wholesale versus retail banking appears to be more balanced in the Czech Republic (21% and 31 %, respectively) and Poland (14% and 25%, respectively), whereas in most of the remaining countries the small size of the domestic money and capital markets contributes to limiting importance of the wholesale activity. Business such as asset management tends to be conducted at the parent company level, owing to economies of scale, predominance of crossover investment on dedicated investment and need to concentrate expertise in units with strong awareness of global trends (Baudino/Caviglia/Corrucci/Pineau, 2004, 31). Foreign banks offer also a range of new products known as Western style consumer goods – consumer credit products, including personal loans, mortgages, store cards, credit cards, auto and retail finance (European Banker, 2004).

2.3 Foreign banks efficiency

Foreign banks benefit from their involvement in CEE markets, generally enjoying higher levels of growth and profitability than they do in their home markets (European Banker, 2004). Goldberg (2003, 3) argues that foreign banks appear to be more efficient than their domestic counterparts, whether privately or government owned. Bonin, Hasan and Wachtel (2005, 51-52) add that foreign banks are more cost-efficient and also provide better service so that domestic banks are forced to become more efficient and to improve their service as well after foreign entry. Sabi (1996, 179) analysed the performance of foreign and domestic banks in Hungary. They conclude

that compared to domestic banks, foreign banks are more profitable, not exposed to a greater liquidity or credit risk, providing less money for consumer loans, and hesitant to provide long term loans for development purposes (Sabi, 1996, 179). These conclusions may be applied to other transition countries as well. Drawing also on Hungary, Hasan and Marton (2003) conclude that the higher the foreign involvement in bank ownership the lower is the inefficiency. Banks with at least 75% and with 50-75% foreign involvement are the most efficient group. Banks with less than 50% foreign ownership fared substantially lower relative to the groups with over 50% foreign ownership and the group with banks up to 25% foreign involvement is relatively less efficient among the foreign-based groups. So massive-scale foreign involvement seems to be better than low-key-approaches.

3. Foreign banks in CEE: Micro/Macro issues

3.1 Foreign banks role in the banking industry of CEE countries

Foreign banks fulfil an important role for the financial stability in CEE countries and effect considerably the development of the banking market and even the overall economic development in these countries. Roldos (2001, 8) considers that foreign bank entry is generally seen as improving the efficiency and stability of local banking system. Foreign banks promote efficiency of the domestic banking sectors. In most cases banks that extend their operations abroad are among the most efficient in their own country, and when such banks start to operate in CEE, they are bound to outperform domestic banks. They improve the quality, pricing, and availability of financial services and are often seen as improving the allocation of credit since they have more sophisticated systems for evaluating and pricing credit risks. As a consequence, those domestic banks that manage to remain active are under pressure to increase their efficiency, thus leading to improved efficiency of the domestic banking system (Baudino/Caviglia/Corrucci/Pineau, 2004, 46).

Uiboupin (2004, 9) argues that the entry of large international banks improve the stability of the host country's banking system because they have better access to global financial markets. Foreign banks' presence helps to achieve even overall financial stability in host countries. Host countries may benefit immediately from foreign entry, if the foreign bank recapitalises a struggling local institution and, in the process, also provides needed balance of payments financing. The better capitalisation and wider diversification of foreign banks, along with the access of local operations to parent funding,

may reduce the sensitivity of the host country banking system to local business cycles and changing financial market conditions. In stress situations, foreign-owned institutions can also provide an alternative location for deposits that does not involve capital outflows (BIS, 2004). The entry of foreign banks can also affect the banking system concentration. In some cases, large foreign banks acquire a significant share of local bank assets by purchasing a local state bank that was being privatized or by acquisition of a large private bank that was in need of recapitalization. The entry of such banks would in turn create pressures on local banks to merge to remain competitive both by capturing economies of scale in back office operations and by being viewed by depositors as offering the same degree of safety and soundness as large foreign banks (Roldos, 2001, 15).

Besides improving financial sector efficiency, foreign banks can provide a more stable source of credit and thus make the banking system more robust to shocks. In times of financial stress local operations of foreign banks are likely to have recourse to additional funding and capital from their head-offices. Roldos (2001, 11) provides an example with Hungary, where head-offices quickly injected capital, when the brokerage subsidiaries of foreign banks suffered large losses in the aftermath of the Russian crisis. While domestic banks contracted their credit and deposits during crisis periods, foreign banks did not show such a procyclical behaviour and thus contributed to a more stable development of bank credit in CEE (De Haas/Van Lelyveld, 2003).

Foreign banks also introduce stronger competition to the local banking market. They exert in some way competitive pressures and demonstration effects on local institutions, often inducing them to reassess business practices, including local lending practices. The result can be better risk management, more competitive pricing, and in general a more efficient allocation of credit in the financial sector as a whole (BIS, 2004). As it is relatively easy for foreign banks to introduce new banking technology and financial innovations, it can be said that host countries benefit from this technology transfers and innovations in products and processes that is commonly associated with foreign bank entry (BIS, 2004). Uiboupin (2004, 10) finds that foreign banks play important role in the improvement of the financial system's infrastructure in the host country – through transfer of good banking practice and know-how, accounting, transparency, financial regulation, supervision and supervisory skills.

The presence of foreign banks may increase the amount of funding available to domestic projects by facilitating capital inflows, diversifying the capital and funding basis and thus attracting foreign direct investments (Uiboupin, 2004, 10). Foreign banks entry may help deepen the inter-bank

market and attract business from customers that would otherwise have gone to foreign banks in other countries. In this way they stimulate the development of the financial markets in the host countries (Uiboupin, 2004, 10). Lensink and De Haan (2002, 214) argue that foreign bank presence may also lead to improvements of bank regulation and supervision, since these banks may demand improved systems of regulation and supervision from the regulatory authorities in the recipient countries. This may then contribute to improving the quality of banking operations of domestic banks. Foreign banks can help encourage consolidation of the banking system, because they have knowledge and experience of other financial activities: insurance, brokerage and portfolio management services (Uiboupin, 2004, 10). These banks may reach and introduce economies of scale and scope beyond the reach of purely local institutions. Cross-border financial conglomerates also induce regional cooperation by the respective financial market supervisors.

Besides all the benefits and positive effects foreign banks have on the local financial market and the overall economic development of the host country, the growing involvement of foreign banks – especially if these are not committed to long-term-regional involvement - gives rise to some concerns. If foreign owners are merely interested in short-term profits from selling non-banking subsidiaries (“asset stripping” as was the case of IPB in the Czech Republic) instead of prudently running a commercial bank, they cause harm to economic growth. The further away their home market is, the easier it is for them to leave.

When integration transforms a domestic institution such that key decision-making and control functions – including strategic planning and risk management – are shifted to the parent, this may backfire onto economic development at large as well. A purely local focus of major banks may reduce the information available to host country supervisors and monetary authorities, and it may interfere with the access of authorities to key firm decision-makers. The reduction in information could become an issue, especially when parent institutions make subsequent strategic changes that significantly affect host country financial markets (BIS, 2004). De Haas and Van Lelyveld (2002, 6) mention that foreign banks may only provide credit to the large and multinational firms, leaving the bad corporate credit risks as well as the retail market and the related payment services to domestic banks. They state also that in some way foreign banks may weaken the position of the less-sophisticated domestic banking system. Domestic banks that are not able to cope with the increased competitive pressures may fail and lead to periods of severe financial instability. Another point that the authors considered is related to the credit supply of foreign banks. If for instance the economic environment in their home countries deteriorates, foreign banks

may lower the credit supply in the host country (De Haas/Van Lelyveld, 2002, 6).

3.2 Foreign banks influence on domestic banks behaviour and performance

Foreign banks have a strong influence on domestic banks performance and behaviour. Lensink and Hermes (2004) argue that foreign banks may stimulate domestic banks to reduce costs, increase efficiency and increase the diversity of financial services through competition. Domestic banks are pressured to improve the quality of their services in order to retain their market shares. Increased competition may lead to lower interest rate margins and profits (Lensink/Hermes, 2004, 555). In contrary, as result of the increased competition domestic banks react with higher overhead costs because they want to retain their image. This can cause reduced profitability (Uiboupin, 2004, 13), but as already mentioned also improve efficiency and functioning of domestic banks (Lensink/Hermes, 2004, 555).

Foreign bank entry also results in spill-over effects. If foreign banks introduce new financial services, this may stimulate domestic banks to also develop such new services, improving the efficiency of financial intermediation of the domestic financial system (Lensink and Hermes, 2004, 555-556). Foreign banks may also introduce modern and more efficient banking techniques that are new to domestic banks and that might be copied by them. Additionally, foreign banks may help to improve management of domestic banks, especially if foreign banks directly participate in the management of a domestic bank, for example in the case of a joint-venture or a take-over. Foreign banks may demand improved systems of regulation and supervision from the regulatory authorities that will result in improved quality of banking operations. Finally, foreign bank entry may contribute to a reduced influence of the government and influential business and political elites on the domestic financial sector, which may reduce the importance of directed credit policies. All these spill-over effects may contribute to more efficient domestic banking practices, which may help to reduce costs.

Foreign banks may increase the quality of human capital in the domestic banking system in a number of ways. If foreign banks import high skilled bank managers to work in their foreign branches, local employees may learn from the practices of the foreign bank managers. Moreover, foreign banks may invest in training of local employees. Increasing the quality of available human capital for the domestic banking system may again contribute to more efficient domestic banking practices (Lensink/Hermes, 2004, 556).

The effects of foreign bank entry on the performance of domestic banks may depend on the banking market development (Uiboupin, 2004, 15) or even on the level of economic development of the given country, as Lensink and Hermes (2004) stated. At least in the short-term, at lower levels of economic development foreign bank entry leads to increased costs, and perhaps also increased margins of domestic banks. At higher levels of economic development the effects may be less clear: foreign bank entry either has no effects or costs and margins of domestic banks fall. The effect of foreign bank entry on profits of domestic banks at lower levels of development is ambiguous. At higher levels of development profits will decline due to higher competitive pressure (Lensink/Hermes, 2004, 558).

The way domestic banks react to foreign banks entry may depend on their market share as well. Bigger banks probably react less to foreign entry, because they are either too big to react quickly to market conditions, or foreign banks entry is less important to them than to smaller banks. Small banks react to foreign banks entry somewhat differently from big banks (Uiboupin, 2004, 15).

There are a lot of studies carried out to analyse the effects that foreign banks entry have on the performance of domestic banks, on their efficiency and profitability. A most comprehensive empirical survey was carried out by Claessens (2001) who investigated the relationship between foreign banks entry and the performance of the domestic banking sector in 80 countries. They used panel estimations with 7,900 bank observations for the period 1988–1995. The main result is that foreign banks tend to have higher interest margins, profitability, and tax payments than domestic banks in developing countries, while the opposite is true in developed countries. Higher foreign bank presence is related to lower profitability and margins of domestic banks. According to Claessens (2001), foreign bank entry may improve the functioning of national banking markets, with positive welfare implications for banking customers in the long run, and the number of entrants matters rather than their market share. This indicates that the impact of foreign bank entry on local bank competition felt immediately upon entry rather than after they have gained substantial market share (Claessens/Demirgüç-Kunt/Huizinga, 2001).

Hermes and Lensink (2003) developed further the model used by Claessens (2001) using data from 990 banks in 48 countries for the period 1990-1996. The results indicate that at a lower level of economic development, foreign banks entry is associated with higher costs and margins for domestic banks. At a higher level of economic development, on the other hand, foreign banks entry has a less significant effect on domestic banks' profitability." (Uiboupin, 2004, 11). Zajc (2002) analysed foreign banks

entry effects on domestic banks in the Czech Republic, Estonia, Hungary, Poland, Slovakia and Slovenia for the period 1995–2000. His results are somewhat different from those presented by Claessens (2001). He found that foreign banks entry is associated with lower non-interest income but increases overhead expenses (Uiboupin, 2004, 12).

3.3 Foreign banks and economic growth

Among the many factors examined in the literature as possible determinants of economic growth, the financial sector has recently gained growing attention in this respect. The consensus view is that financial development is associated with superior economic performance: countries with better-developed financial systems have higher levels of per capita real GDP and tend to grow faster. As many empirical studies conclude that foreign banks play an influential role in stimulating financial development, the issue arises to what extent these are spurring economic growth. As they have the incentive, the know-how and expertise to drive financial sector development, they mobilize savings and allocate and redistribute capital for investment. If domestic financial institutions do not perform these functions properly, foreign banks' role in the economy becomes essential. This central notion is developed further in the following.

3.3.1 Financial development and economic growth

Levine (1996b) argues that the country's level of financial development plays an important role in determining the rate of economic growth as financial development crucially affects the speed and pattern of economic development. He states that there is a positive relationship between financial development and economic growth. The level of financial development will affect growth by altering the economy's saving rate and by influencing the efficiency with which economies allocate resources. Beck, Levine and Loayza (2000) further add that accounting reforms that strengthen creditor rights, contract enforcement, and accounting practices can further boost financial intermediary development and thereby induce a rapid acceleration in economic growth.

3.3.2 Financial sector and economic growth

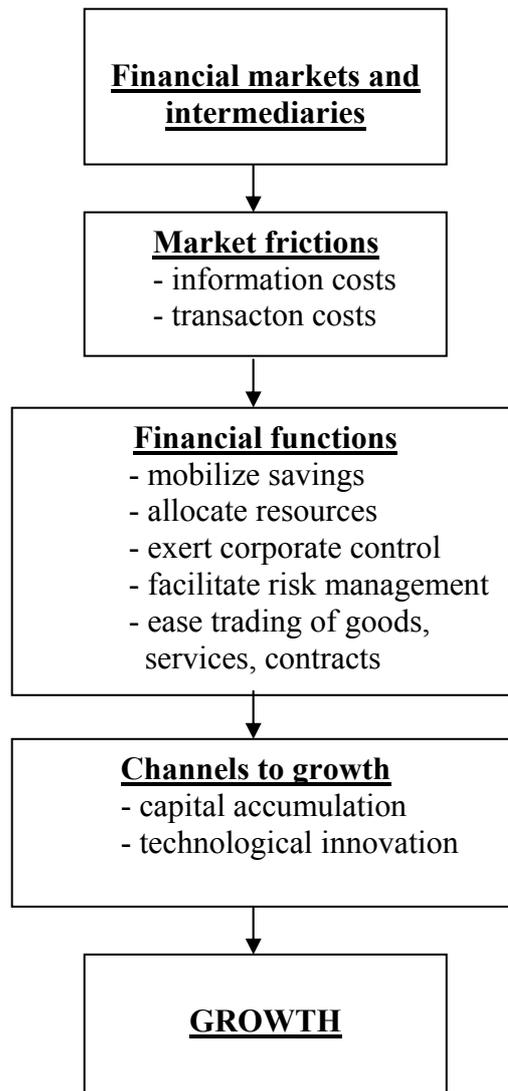
Financial systems are a fundamental feature of the process of economic development and there is strong positive link between the functioning of the financial system and long-run economic growth. Many theoretical and empirical studies prove that a strong financial sector promotes economic growth. Schumpeter (1934) stressed the role of the banking sector

as a financier of productive investments and thus as an accelerator of economic growth. Pagano (1993) suggests three ways in which the development of financial sector might affect economic growth - it can increase the productivity of investments, it reduces transaction costs and thus increases the share of savings, and third the financial sector development can either promote or decline savings. Greenwood and Jovanovic (1990), Levine (1991), Bencivenga and Smith (1991) and Saint-Paul (1992) have all also developed theoretical models to prove that efficient financial markets improve the quality of investments and enhance economic growth (Koivu, 2002, 9). According to Wachtel (2003) the depth of the financial sector and a greater provision of financial services are associated with economic growth (Haiss/Steiner/Eller, 2005, 4-5).

Levine (1996b) argues that financial systems reduce information and transaction costs and influence saving rates, investment decisions, technological innovation, and long-run growth rates. He finds a positive relationship between growth and the quality of the functions provided by the financial system that will be mentioned further down. Countries with larger financial sectors relative to GDP and countries where banks play a larger role relative to the central bank in allocating credit have higher levels of real per capita income and grow faster (Levine, 1996b). As Koivu (2002, 7) shows, CEE countries with developed banking sectors have smaller interest margins and higher economic growth than countries struggling with banking sector reform.

Levine (1996b, 55) states that the financial system is shaped by non-financial developments as well. Legal systems, political changes, national institutions, changes in Telecommunications, computers, non-financial sector policies, institutions, and economic growth itself influence the quality of financial services and the structure of the financial system. Changes in economic activity can influence financial systems as well. According to Levine (1996a) all financial systems provide basic financial services that are crucial for economic activity and long-run economic growth. These services may affect growth through two channels: by increasing the rate of physical capital accumulation or by improving the efficiency with which economies combine capital and labour in production. Specifically, the financial system facilitates transactions, eases risk management, mobilizes saving, allocates savings, and monitors the behaviour of managers after funding projects. Countries with financial systems that are better at providing and performing these financial services are more economically developed and grow at a faster pace than those with less developed financial services (Levine, 1996a).

The following figure, provided by Levine (1996b) can also explain how financial system stimulates capital formation and enhances economic efficiency:



Source: Levine, 1996b

Particular market frictions – transaction and information costs - motivate the emergence of financial markets and intermediaries that provide basic financial functions (Levine, 1996b, 6). These financial functions affect economic growth through each of the following channels – capital accumulation and technological innovation. Levine (1996a) concludes that if the financial system stimulates capital formation and enhances economic efficiency, foreign banks may then have an important role in economic

development. Foreign banks that improve the provision of growth-enhancing financial services will promote economic development.

Koivu (2002) examined the link between efficiency and size of the banking sector and economic growth, using panel data from 25 transition countries during the period 1993-2000. She used two variables to measure the level of financial sector development – the interest rate margin (the margin between lending and deposit interest rates) and the amount of bank credit allocated to the private sector. The results show that the interest rate margin is significantly and negatively related to economic growth and the amount of bank credit does not accelerate economic growth. Its value is even negatively related to economic growth and the causality between the growth of credit and real GDP growth is unclear. The main reasons behind this result could be the numerous banking crises the transition countries have experienced and the soft budget constraints that are still prevalent in many transition countries. The findings of this study also support the view that the presence of an efficient banking sector accelerated economic growth in transition economies (Koivu, 2002).

3.3.3 Transmission channels from foreign banks to economic growth

Berger (2004) find that larger market shares for foreign banks are associated with better economic performance in terms of faster GDP growth, and higher bank lending to GDP ratios (BIS, 2004, 12). In this respect, Haiss, Steiner and Eller (2005) identified four transmission channels how foreign banks (or more specifically, financial sector foreign direct investment, FSFDI) spur economic growth. They distinguish between price effects (i.e. shrinking interest margins that translate into lower cost of capital for companies), volume effects (more stable, larger credit flows), institutional effects (e.g. well-capitalized banks with sophisticated risk assessment systems have a broader array of investments) and spillover effects.

Table 1 Financial Sector FDI (FSFDI) - Growth Transmission Channels

Intermediation/price:	FSFDI ↑	spread ↓	cost of capital ↓	investment ↑	GDP ↑
Intermediation/volume:	FSFDI ↑	credit availability ↑	investment ↑	investment ↑	GDP ↑
Institution building & corporate governance:	FSFDI ↑	bad loans ↓	credit availability ↑	investment ↑	GDP ↑
Signal effects:	FSFDI ↑	FDI & PFI ↑		investment ↑	GDP ↑

Source: Haiss/Steiner/Eller, 2005

Increased competition, credit technology transfer that improve productivity and efficiency, and improved risk assessment (that we already mentioned as positive effects from foreign banks involvement) bring down spreads and make financing investments cheaper, thus stimulating investment and economic growth. Foreign banks inject fresh money in the financial sector of host countries and generally stabilize lending. Better risk assessment allows financing of higher risk/return-projects and broader product range allows diversified company finance. All this increases the availability of credit that again means more capital for investment and economic growth. The third transmission channel implies that international accounting standards and better management techniques will reduce bad loans, so that there is more room for “good loans”. Foreign bank entry may attract further foreign direct investment and portfolio foreign by productive and other services sector companies (e.g. large banks will attract their customers - big companies to follow them in new markets). Foreign banks can increase economic growth by raising the increasing capital inflows (Levine, 1996a). Foreign banks can also facilitate capital market growth by helping local companies raise money via stock or bond issuance and will also facilitate the access to international capital markets so that this will again stimulate and accelerate economic growth (Haiss/Steiner/Eller, 2005). Foreign bank presence can also influence economic growth in more indirect ways.

3.4 Foreign banks and Small and Medium Enterprises

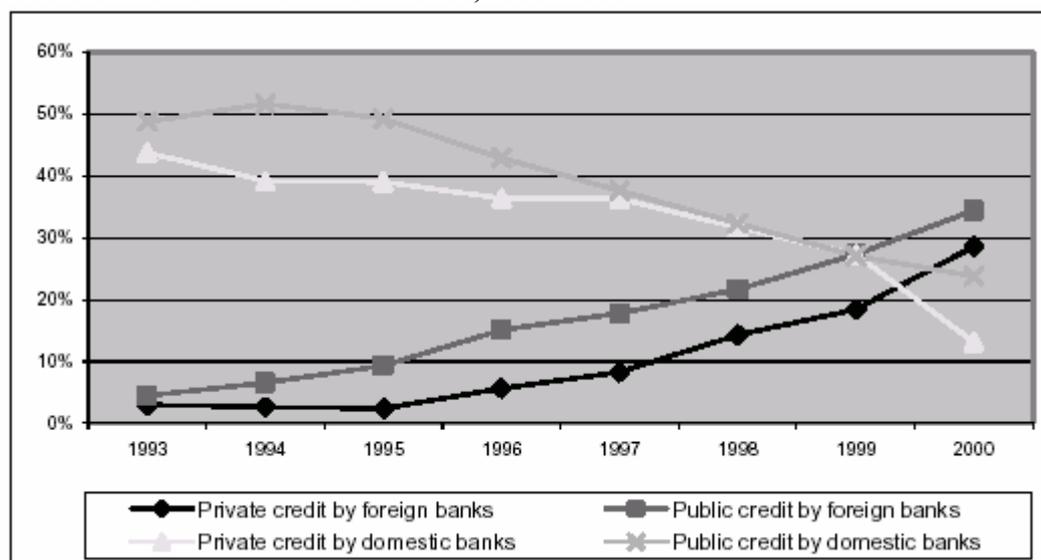
As small and medium sized enterprises (SME) represent around 90 percent of the total firms in the transition countries, they play a major role in their economies. The access to credit is crucial for their survival and as they are significant sources of innovation, their financing contributes significantly to economic development and growth (Cárdenas/Graf/O’Dogherty, 2004, 7). However, De Haas and Naaborg (2005) argue that foreign banks initially focused almost exclusively on multinationals and the largest local corporations or even on serving multinational corporations from their home country, rather neglecting SMEs. The reason for that could be that foreign banks that acquired large regional banks in CEE “inherited” a portfolio focused on large corporate customers or, in the case of former savings banks, retail banking. Other banks entered CEE mainly through greenfield investments with the goal of serving multinational customers. For both types of banks, small business finance remained unimportant during the first half of the 1990s. However, when the transition process advanced, foreign banks started to lend more to SME. This was a consequence from the increased competition in the market for large corporate customers, eroding interest

margins and fees and stimulated foreign banks to start serving SMEs and retail clients as well. Another reason for increasing the lending to SME was that foreign banks improved their ability to efficiently screen and monitor smaller firms (De Haas/Naaborg, 2005).

3.5 Foreign banks serving the public and private sector

Besides SMEs, the public sector plays a shrinking, though important role in CEE economies. Naaborg, Scholtens, De Haan, Bol and De Haas (2003) analysed the role played by foreign banks in extending credit to both the private and public sector in comparison with domestic banks over the 1993-2000 period for selected CEE countries (Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovenia). Apparently, foreign banks replaced domestic banks as creditors. In 1993, domestic banks were the primary source of credit for the public and the private sector, while in 2000 foreign banks dominate both markets. Although foreign banks increased their lending to both public and private sector, credit to the private sector is still relatively low and public credit of foreign as well as of domestic banks exceeds private credit (Naaborg/Scholtens/De Haan/Bol/De Haas, 2003).

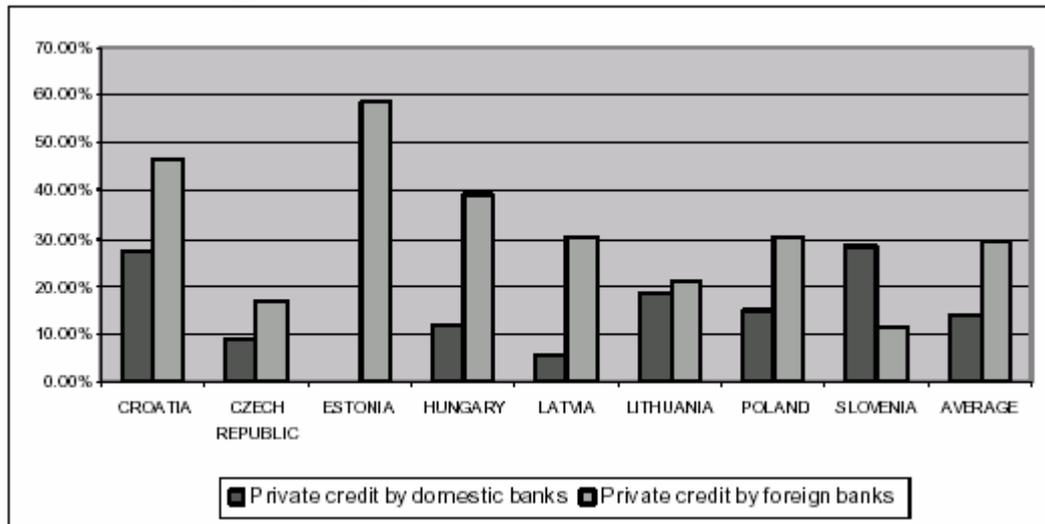
Figure 2 Credit supply of domestic and foreign banks as share (%) of total bank credit in CEE countries, 1993-2000



Source: Naaborg/Scholtens/De Haan/Bol/De Haas (2003)

Comparing the fraction of private credit provided by both foreign and domestic banks in some CEE countries, in all countries, except for Slovenia, foreign banks appear to be more involved with lending to the private sector than domestic banks. Still, there are substantial differences among the CEE countries as to the relative importance of private lending by foreign banks. The most extreme case is Estonia, where domestic banks hardly provide credit to the private sector (Naaborg/Scholten/De Haan/Bol/De Haas, 2003).

Figure 3 Credit to the private sector as share of total bank credit: domestic vs. foreign banks, 2000



Source: Naaborg/Scholten/De Haan/Bol/De Haas (2003)

As Haiss, Steiner and Eller (2005) conclude credit supply to different target-groups – public and private borrowers, has various impacts on economic development. For example, lending to the public sector may be important to reduce budget deficits and thus promote economic stability whereas credit to the private sector is necessary to further support private investment and thus leading to economic growth. Credit to the private sector is very important for economic development but remains relatively low in CEE. Credit to the public sector may be growth enhancing as well (Haiss/Steiner/Eller, 2005, 5). But growing credit-supply is not enough to guarantee a positive impact on investments because as Mehl and Winkler (2003) stress fast credit growth can also be a warning signal indicating a potential financial crisis.

4. Conclusion

The financial systems in CEE countries have experienced a lot of structural changes over the past decade - the increased entry of foreign banks is one of the most impressive and crucial of them. Their involvement has created new challenges for the financial sector in CEE countries and their successful operations have contributed to a lot of positive changes and further development of the financial markets in these countries. Today foreign banks have a strong presence in CEE – they own more than 70 per cent of banking assets in the region and have become major players in the financial systems of these countries. They fulfil an important role for the financial stability there and contribute not only to the development of the financial markets, in particular the banking markets, but also to the overall economic development of these countries.

We conclude that foreign banks promote efficiency in local banking systems. They improve the financial stability of the host country in the way that they provide stable source of credit and thus making the financial sector more stable in time of crises. Foreign banks help also to improve quality, pricing and availability of financial services - directly as providers of these services and indirectly through increased competition. Their presence intensifies competition in the domestic banking markets that results again in improved efficiency and quality of financial infrastructures. Foreign banks may stimulate better regulation and supervision and thus contributing to improved quality of banking operations of domestic banks, and may even attract foreign direct investments. Host countries can benefit from technology transfer, better banking practices and know-how, innovations in products and processes that foreign banks implement. All these spill-over effects contribute to more efficient domestic banking practices, which, in turn, may accelerate economic development and enhance economic growth in these countries.

Well developed financial sector affects economic growth in the way that it increases investments, reduces transaction costs, stimulates capital formation, alters the saving rate and thus promoting or declining savings, and enhances economic efficiency. We argue that if this consensus that financial development and efficient financial sector influence economic growth holds true, prudent foreign banks with long-term regional commitment doing just that will also contribute to economic growth. Both direct channels (price, volume and institutional) as well as indirect channels (e.g. signalling) were identified through which foreign banks contribute to economic growth and stability. More empirical research is necessary to verify these channels.

References

- [1] BAUDINO, P., CAVIGLIA, G., CORRUCCI, E., PINEAU, G. Financial FDI to the EU Accession Countries. Working paper 19 March 2004, European Central Bank, Directorate General International and European Relations, DG-I/MAW/04 78
- [2] BECK, T., LEVINE, R., LOAYZA, N. Financial intermediation and growth: causality and causes. *Journal of Monetary Economics*, 2000, vol. 46, pp. 31-77
- [3] BIS, Foreign direct investment in the financial sector of emerging market economies, Report submitted by the Committee on the Global Financial System, Bank for International Settlement, March 2004. Access from: <http://www.bis.org/publ/cgfs22.pdf>
- [4] BONIN, J.P., HASAN, I., WACHTEL, P. Bank performance, efficiency and ownership in transition countries. *Journal of Banking & Finance*, 2005, vol. 29, pp. 31–53
- [5] BONIN, J.P. Banking in the Balkans: the structure of banking sectors in Southeast Europe. *Economic Systems*, 2004, vol. 28, pp. 141–153
- [6] BREYER, P. Central and Eastern Europe – The Growth Market for Austrian Banks. *Monetary policy & the economy*, 2004, vol. 3, pp. 63-88. Access from:
[7] http://www.oenb.at/en/img/mop_20043_analyses5_tcm16-21311.pdf
- [8] CÁRDENAS, J., GRAF, J., O'DOHERTY, P. (2004): Foreign banks entry in emerging market economies: a host country perspective, FDI in the financial sector of emerging market economies, BIS Committee on the Global Financial System, March 2004. Access from: <http://www.bis.org/publ/cgfs22Mexico.pdf>
- [9] CLAESSENS, S., DEMIRGÜC-KUNT A., HUIZINGA, H. How does foreign entry affect domestic banking markets? *Journal of Banking & Finance*, 2001, vol. 25, pp. 891-911
- [10] DE HAAS, R., VAN LELYVELD, I. Foreign bank penetration and private sector credit in Central and Eastern Europe. DNB Staff Reports 2002, No. 91, De Nederlandsche Bank
- [11] DE HAAS, R., VAN LELYVELD, I. Foreign Banks and Credit Stability in Central and Eastern Europe: Friends or Foes? A Panel Data Analysis. Working paper, May 2003, MEB Series no. 2003-04 – Research Series Supervision no. 58, De Nederlandsche Bank
- [12] DE HAAS, R., NAABORG I. Foreign Banks in Transition Economies: Small Business Lending and Internal Capital Markets. Working paper, April 2005
- [13] EUROPEAN BANKER, EU accession gives boost to CEE bank prospects. May 2004,

- [14] Access from:
<http://proquest.umi.com/pqdweb?did=758515991&sid=2&Fmt=3&clientId=37603&RQT=309&VName=PQD>
- [15] GOLDBERG, L.S. Financial FDI and Host Countries: New and Old Lessons. Working paper, December 24, 2003, Federal Reserve Bank of New York and N.B.E.R.
- [16] HASAN, I., MARTON, K. Development and efficiency of the banking sector in a transitional economy: Hungarian experience. *Journal of Banking & Finance*, 2003, vol. 27, pp. 2249–2271
- [17] HAISS, P., STEINER, K., ELLER, M. How do foreign banks contribute to economic development in transition economies – how much do we know about challenges and opportunities? Working paper, June 2005
- [18] KOIVU, T. Do efficient banking sectors accelerate economic growth in transition countries? BOFIT Discussion Papers, no.14, 2002, Bank of Finland, Institute for Economies in Transition
- [19] LENSINK, R., DE HAAN, J. Do reforms in transition economies affect foreign bank entry? *International Review of Finance*, 2002, vol. 3:3/4, pp. 213-232
- [20] LENSINK, R., HERMES, N. The short-term effects of foreign bank entry on domestic bank behaviour: Does economic development matter? *Journal of Banking & Finance*, 2004, vol. 28, pp. 553–568
- [21] LEVINE, R. (a) Foreign Banks, Financial Development and Economic Growth. Barfield (edit.), 1996, International Financial Markets: Harmonisation Versus Competition, Washington, AEI Press
- [22] LEVINE, R. (b) Financial development and economic growth: Views and agenda. Policy research working paper 1678, October 1996. The World Bank, Policy Research Department, Finance and Private Sector Development Division
- [23] NAABORG, I., SCHOLTENS, B., DE HAAN, J., BOL, H., DE HAAS, R. How Important are Foreign Banks in the Financial Development of European Transition Countries? Working paper 2003, CESifo Munich
- [24] ROLDOS, J. FDI in Emerging Markets Banking Systems. Paper prepared for the OECD Global Forum on International Investment: “New Horizons and Policy Challenges for Foreign Direct Investment in the 21st Century”, Mexico City, November 26-27, 2001
- [25] SABI, M. Comparative Analysis of Foreign and Domestic Bank Operations in Hungary. *Journal of Comparative Economics*, 1996, vol. 22, no. 0017, pp. 179–188
- [26] SVETLOV, A. Foreign Banks' Entry into Eastern Europe: the Importance of Framework Conditions. December 2002. Access from:

- [27] <http://www.politikforum.de/forum/showthread.php?threadid=23591>
- [28] UIBOUPIN, J. Effects of Foreign banks entry on bank performance in the CEE countries. Working paper 2004, University of Tartu, Faculty of Economics and Business Administration

REGULATION OF BANKS IN BOSNIA AND HERZEGOVINA – NEW ORGANIZATIONAL STRUCTURE

Igor Živko

University of Mostar
Faculty of Economics
Department of Finance
Matice hrvatske bb
88000 Mostar
Bosnia and Herzegovina
e-mail: igorzivko@net.hr
telephone: +387 36 355 100

Abstract

Banks in financial systems, specially in thin one, like as the financial system in Bosnia and Herzegovina (BH), have an important role in financial intermediation between creditors and debtors, implementation of monetary policy and improvement and growth of financial market (money market). Financial system of Bosnia and Herzegovina is “bank dominated” system, which means that in financial system dominated banks (credit institution). For that reason it is an important that financial regulation and supervision conduct in order to enhance a stability promotion and a soundness of the financial sector. Bosnia and Herzegovina is the country, which has a complex social order. Dayton Peace Agreement from 1995, has been organized this country in two entities and in one district. In Bosnia and Herzegovina regulation and supervision of banks has been implemented by the Banking Agencies from two entities, the one in the Federation of Bosnia and Herzegovina (FBiH) and the other in the Republic of Srpska (RS). They conduct financial regulation and supervision in the name of the entities and they are independent in the conduct of financial supervision on territory of their entities. Because of current situation it's vary important to improve organizational structure of bank's regulation and supervision and make good quality system of regulation and supervision unique for complete banking system which is the base of the BH financial system.

Keywords: bank, regulation, separate entities regulation, reform, new organizational structure;

1. Introduction

Banks in financial systems, specially in thin one, like as the financial system in Bosnia and Herzegovina (BH), have an important role in financial intermediation between creditors and debtors, implementation of monetary policy and improvement and growth of financial market (money market). Financial system of Bosnia and Herzegovina is “bank dominated”. In table 1 we will show number of banks and assets of banking system through last five years in Bosnia and Herzegovina.

Table 1 Number of banks and assets of banks in Bosnia and Herzegovina

	2000	2001	2002	2003	2004
<i>Number of banks</i>	55	48	40	37	33
<i>Assets (in millions EUR)</i>	2187,2	2858,9	3253,8	3942,6	4820,4
<i>Assets of banks in GDP</i>	31,7%	41,4%	47,4%	57,2%	71,8%

Source: www.cbbh.ba

In those financial systems dominated banks (credit institution) with some insurance companies, privatisation investment funds and entities pension funds. In table 2 we will present nonbanking financial institutions in Bosnia and Herzegovina.

Table 2 Number of banks and assets of banks in Bosnia and Herzegovina

<i>Number of</i>	2004
<i>Banks</i>	33
<i>Pension fund¹</i>	2
<i>Insurance company</i>	29
<i>Privatisation investment fund</i>	24
<i>Micro credit organization</i>	15

Source: Author's calculation.

Because of special nature of banking and banking contracts, regulators have imposed numerous restrictions on their products and geographic activities. Failure to provide these services or breakdown in their efficient provision can be costly to both ultimate source (household) and users (firms) of saving.

¹ Bosnia and Herzegovina have two public pension funds on entities level and soon we expected to start reform of that system.

For that reason it is very important to create and continually improve good bank's system of regulation. Financial regulation and supervision is conducted in order: to enhance a stability promotion and a soundness of the financial sector, reduce risks in the financial system to enhance transparency of the financial sector and contribute to the prevention of abuse of the financial sector for criminal purposes.

Banks demand deposits, but depositors, as bank's creditors must have confidence that their money is in safe hands. Banks left to their in free banking market will not produce their financial products and services in an efficient manner and the lowest possible cost. Reasons that justify regulation and supervision of bank are: moral hazard, asymmetric information, competition, and monopoly.

Moral hazard is the name given to one kind of risk, which presents possibility that one party in a contract can change their behaviour to the detriment of the other party once the contract, has been concluded. In banking system moral hazard is the risk that banks will engage in activities that are undesirable (immoral) for lenders (depositors).²

Problems or the biggest cost which one person can has in process of ensured informations, which need for make business decision, we call asymmetric information. For that reason depositors can't evaluate soundness and security other banks in banking system, as they can evaluate economics effects in make business with that banks.

If a bank or group of banks has monopoly position in that case they can use theirs monopoly position for making monopoly profits on banking market. For that is important that banks have to comply with financial rules and supervisory requirements. Bank's regulation must give answers on next questions:

1. Who is responsible for bank's regulation?
2. Which are relevant source of lows regulation?
3. What are aims of regulation system?
4. Is system of bank's regulation sound and stabile?
5. Is system of bank's regulation effective?
6. Are there problems in system of regulation and how to solved it?

Answers to those questions can give the mark for organizational structure's quality, capability and possibility that system realizes aims of regulation. There are numerous aims in system of regulation, but we will give only the most important of them:

² Mishkin, S. F. The Economics of Money, Banking and Financial Markets, 7th ed., Person Addison-Wesley, Boston, USA, 2004, pp. 181

1. safety of banking system
2. soundness and competitive of banking system
3. consumer protection
4. economic efficiency
5. market structure and competition
6. credit allocation
7. monetary control.

Banking system is sound and safety if banks, which represent parts of banking system, are sounded and safety. In front of bank's supervisors, there is a need for supervision and control size of bank's risks exposure. Supervision is oriented in this case on control procedures for managing of bank's risks and an internal control. Specially, it is important to make clear is one bank able to manage with its risks.

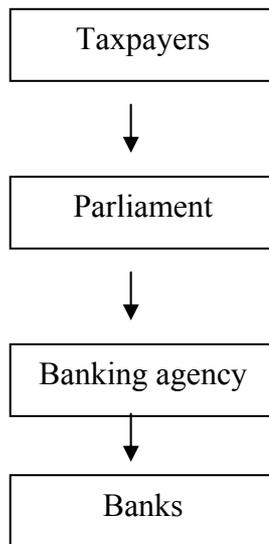
Second goal is a consumer protection, which is an active part in bank's credit business as in deposits business and business with transactions accounts. Regulators must give possibilities to formulate and implement laws about consumer protections from bank's credit discrimination through insuring equal credit possibilities to all consumers, abolished inappropriate credit's costs (different kind of provisions) or interest rate in negotiate in credit business or taking deposits and services electronic fund transfers.

Bank's technical efficiency means giving services with a small possible costs looking in the term of social funds, which are used, in giving services. For banks, we can say that they have allocation efficiency when they form prices for their products on the level of their marginal costs.³

Regulation of banks must take in account conflicts aims in banking business, bank's safety and soundness on the one side and efficiency of banking system on the other. We can say how regulation's aim minimizes banks' exposure to the risks in their business (unsystematic risk). Also for regulators are important isolating banks failures to avoid a domino effect within the system (systematic risk). Regularly, country's Parliament represents legal representative of tax's payers (their citizens), supervise bank's regulators which now supervise banks in insurance deposits system. From this fact we can derivate principal – agent model of bank's supervision, which we can shows in figure 1.

³ Miler, R. L., Van Hoose, D.D. Modern Money and Banking, Mate, Zagreb, 1997, pp. 229

Figure 1 Principal – agent model of bank’s supervision



Source: Sinkey, J. Commercial Bank Financial Management, Prentice Hall, New Jersey, 2002. pp. 560

From figure 1 is clear that voters or taxpayers citizens elect Parliament, which makes banking laws, confirms and supervise regulators and deposit insurers. Regulators and deposit insurers than regulate, supervise, insure, and examine depository institutions.

2. Banking system in Bosnia and Herzegovina – their characteristics

Banking system of Bosnia and Herzegovina present Central Bank of Bosnia and Herzegovina, entities banking agencies and commercial banks, which have been existed in two separate banking, sector, Federation of Bosnia and Herzegovina and Republic of Srpska. In this part of the paper we will say something about characteristics of banking system and rule of CBBH in that banking system.

In Bosnia and Herzegovina operate 33 banks. From that number 75% are in foreign private ownership. Banks of Bosnia and Herzegovina like as banks in other transitional countries pass through fazes of banking crises, capitalization and privatisation. Process of globalisation increases performances of banks. In first place we think on diversification of banking

products and services, involved new media as Internet in delivery system of banks and increasing quality of bank's services.

Table 3 Balance sheet of banking system of Bosnia and Herzegovina at the end of 2004. (000 Euro)

Assets		Liabilities	
Money assets	1.702.750	Deposits	3.544.669
Securities	13.067	Loans from other banks	1.707
Placements in other banks	56.515	Loans payable	464.063
Loans - net	2.676.021	Other liabilities	201.235
Premises and other assets	210.692	Capital	566.523
Other assets	119.152		

Source: Authors calculation.

Major position in banks' liability are deposits, while in banks' assets dominant credits. Share of investment in total value of bank's balance sheet is small. That situation is result of undeveloped money market and existed orthodox currency board. Today commercial banks are one of creators of money as important component of money supply process. For that reason it is important regulate and supervise banks.

2.1 Role of Central Bank of Bosnia and Herzegovina

Parliament of Bosnia and Herzegovina 1997 established central bank of Bosnia and Herzegovina (CBBH). With aim to formulating and implementing monetary policy CBBH don't have possibility to manage with monetary policy instruments in relation to other central banks. Reason for that position of CBBH is pure (orthodox) currency board system. A currency board is a monetary institution that issues notes and coins fully backed by a foreign "reserve" currency and fully convertible into the reserve currency at a fixed rate and on demand. The reserve currency is a convertible foreign currency or a commodity chosen for its expected stability. The country that issues the reserve currency is called the reserve country. Table 3 lists differences between currency board and a typical central bank.

Table 3 Differences between typical currency board and central bank

Typical currency board	Typical central bank
Usually supplies notes and coins only	Supplies notes, coins, and deposits
Fixed exchange rate with reserve currency	Pegged or floating exchange rate
Foreign reserves of 100 per cent	Variable foreign reserves
Full convertibility	Limited convertibility
Rule-bound monetary policy	Discretionary monetary policy
Not a lender of last resort	Lender of last resort
Does not regulate commercial banks	Often regulates commercial banks
Transparent	Opaque
Protected from political pressure	Politicised
High credibility	Low credibility
Earns seigniorage only from interest	Earns seigniorage from interest and inflation
Cannot create inflation	Can create inflation
Cannot finance spending by domestic government	Can finance spending by domestic government
Requires no "preconditions" for monetary reform	Requires "preconditions" for monetary reform
Rapid monetary reform	Slow monetary reform

Source: Hanke, S., Schuler, K., Currency Board for Developing Countries – A Handbook, Institute for Contemporary Studies, San Francisco, USA, 1994, Access from <http://www.users.erols.com/kurrency/icegrev.html>

For our analyse of bank regulation it is clear that CBBH don't have possibility to regulate and supervise their banking and financial system.

2.1.1 Mission and goals of Central bank of Bosnia and Herzegovina

The main goals and tasks of the Central Bank are defined by the Law and in accordance with the General Peace Agreement in Bosnia and Herzegovina. Central Bank of Bosnia and Herzegovina maintains monetary stability by issuing domestic currency according to the Currency Board arrangement with full coverage in freely convertible foreign exchange funds under fixed

exchange rate 1 KM: 0,51129 euro. CBBH have must achieve the stability of domestic currency. The basic tasks of CBBH are:⁴

1. formulate, adopt, and control the monetary policy of Bosnia and Herzegovina
2. hold and manage the official foreign exchange reserves of the central bank in a safe and profitable way
3. support and maintains appropriate payment and settlement systems
4. co-ordinate the activities of the BH Entity Banking Agencies which are in charge of bank licensing and supervision.

3. Organisational structure of bank's regulation system in Bosnia and Herzegovina

Bosnia and Herzegovina is the country, which has a complex social order. Dayton Peace Agreement from 1995. has been organized this country in two entities and in one district. In Bosnia and Herzegovina regulation and supervision of banks has been implemented by the Banking Agencies from two entities, the one in the Federation of Bosnia and Herzegovina (FBiH) and the other in the Republic of Srpska (RS).⁵ They conduct financial regulation and supervision in the name of the entities and they are independent in the conduct of financial supervision (figure 1). The main tasks of entities agencies, determined by the Law, are:

1. issuing licenses for establishment and performance of banks,
2. issuing licenses for changes of the organizational structure of banks,
3. issuing approvals for appointment of their managing staff,
4. issuing licenses for performing internal payment system,
5. collecting, processing and recording data submitted to agency by banks in accordance with the regulations,
6. supervising banking operations and undertaking appropriate measures in accordance with the Law on Banks, the Law on the Banking Agency and regulations,

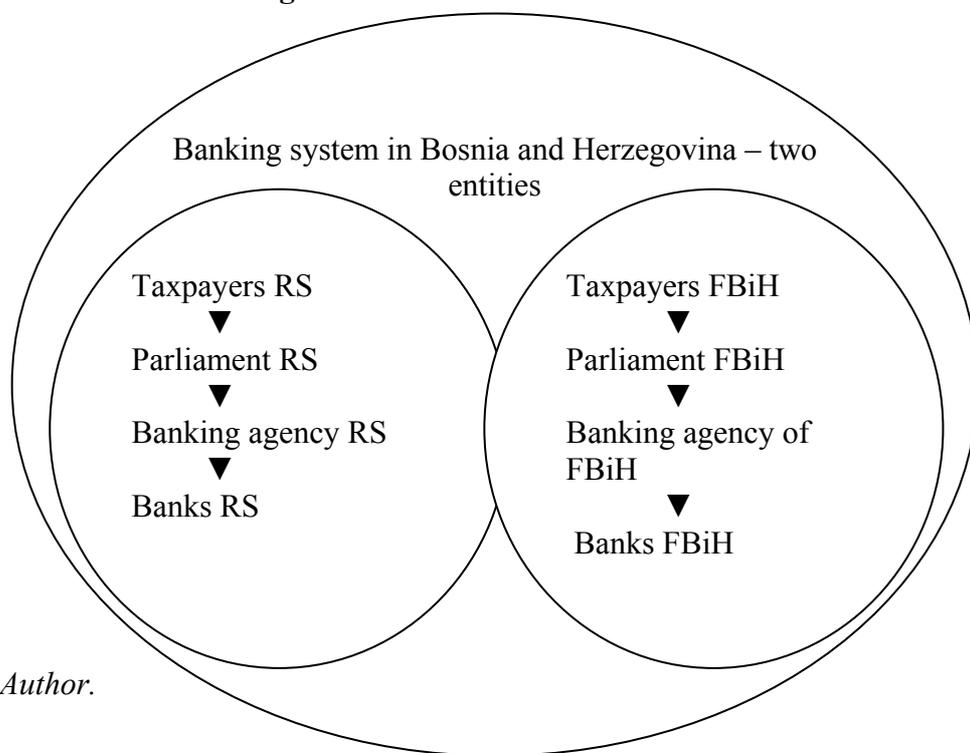
⁴ Law of Central Bank of Bosnia and Herzegovina, The Official Gazette, No. 1., 1997.

⁵ Law in the Banking Agency of the Federation of Bosnia and Herzegovina, the Official Gazette No. 9/96, 27/98, 20/00 and 45/00; The Law on Banking Agency of Republic Srpska, the Official Gazette of Republic Srpska No. 10/98, 16/00, 18/01, 71/02, 18/03, and 39/03.

7. initiating, managing and supervising the procedure of provisional administration, liquidation, bankruptcy, and rehabilitation of banks,
8. revoking banking licenses in accordance with the Law,
9. issuing decisions regulating banks work,
10. performing evaluation of conditions and issuing approvals to banks regarding new issues of shares, etc.

Practically Bosnia and Herzegovina has got a dual and a separate system of banking regulation and supervision on entities level. It is possible, that in this situation, two separate and independent agencies can bring different roles for the regulation and procedures in bank's supervision.

Figure 2 Dual principal – agent model of regulation and supervision in Bosnia and Herzegovina



Source: Author.

Bosnia and Herzegovina today has got two valid bank's law⁶ and also two supervision's procedures.⁷ Impossibility to provide the regulation an

⁶ Low on Banks, the FBH Official Gazette No. 39/98, 32/00; Low on RS Banks, the Official Gazette of RS No. 44/03.

bank's supervision through all territory of the state is the biggest problems because the entity's agencies has been charged to make it only on their own territory. Banking system in Bosnia and Herzegovina is the single system (political impact on work in the entities agencies, majority of large banks are doing business over the entire territory of country through networks of branches, the degree of the foreign ownership in the BH banking system is extremely high and it is necessary for BH to continue the adoption of the international standards in the supervision domain).

So, how to regulate banks which make business through all the territory of state? The Central bank of Bosnia and Herzegovina doesn't have an impact on the regulation and supervision of banks in the country because of the existed currency board in the monetary system. How to find than a solution for these problems in system of regulation and supervision?

4. Organizational structures of regulation systems in the world

For this purpose we shall make comparison between both the characteristics of the BH regulation system and the characteristics of the systems in other countries. Selected countries are countries with currency boards and countries with central banks. In the United States, the Federal Reserve makes regulation and supervision, but the Office of the Comptroller of the Currency (OCC), the FDIC, and an individual state banking departments also supervise banks. In Germany, the Bundesbank collects and processes banking information, even though the Federal Banking Supervisory Office (FBSO) is the primary regulator, and private accounting firms are responsible for most of the on-site supervision. In Japan, the Ministry of Finance is the chief regulator, but it alternates on-site inspections with the Bank of Japan. It is clear that in different models of organize structures exist in bank's regulation and supervision and financial systems. In the United Kingdom operate Financial Services Authority, which supervised all financial institution in the country. Estonia has the same system like the United Kingdom in supervision but regulating of banks is role of Central bank of Estonia. Only, the National Bank of Lithuania regulates and supervises banks in its country.

⁷ Decision on Minimum Standards for Bank's Capital Management, Decision on Minimum Standards for Bank's Credit Risk Management and Assets Classification, Decision on Minimum Standards for Bank's Risk Concentration Management, Decision on Minimum Standards for Documenting Bank's Lending Activities Criteria for Internal Bank rating by the Banking Agency of entities agencies, Instruction for Preparation of Bank's Balance Sheets and Supporting Forms etc.

According to table 4 we can see how in selected countries there are also different organizational structures of bank's regulation systems. Function of regulation and supervision make central banks, independent banking agency under central bank hand, or we can talk about combination of these two structures.

In some countries there are centralize regulation's systems which supervise all financial activities (England, Estonia). There are two independent banking agencies in Bosnia and Herzegovina which present inappropriate supervision's organizational structure in consideration on the fact that these two agencies can make regulation and supervision only on it's territory – territory of entities in which agencies have it's location.

In continuous attempting countries of region to come closely European Union they faced with need of permanent adaptation to "acquis communautaire" EU in banking regulation and supervision. European Central Bank with euro system systematically supervises structural and cyclical changes in euro era/banking system of EU and the other financial sectors. Aim of these activities is:

1. protection financial system
2. increasing sensitivity on possible socks in financial sector.

Table 4 Comparison characteristics of regulation system Bosnia and Herzegovina and systems of regulation selected countries

Countries	Croatia	England	Estonia	Lithuania	Hong Kong	Bosnia and Herzegovina
Regulators/Supervisors	Croatian National Bank Sector for regulation and supervise	Financial Services Authority Independent nongovernmental body	Financial Supervision Authority Finantsinspektsioon Independent nongovernmental body it operate in coordination with central bank	Central bank of Republic Lithuania	Hong Kong Monetary Authority	1. Banking Agency of Federation Bosnia and Herzegovina FBA, 2. Banking Agency of Republic Srpska ABRS
Institutions under supervision	banks	Credit institutions – banks, insurance companies, investment company, financial markets, pension fund.	Credit institutions – banks, insurance companies, investment company, financial markets, pension fund.	Credit institutions – banks, other legal entities and subsidiary foreign credit institutions which operate on license issued at central bank	authorized institutions: licensed banks, restricted license banks, deposit-taking companies	FBA supervise commercial banks in Federation Bosnia and Herzegovina, ABRS supervise commercial banks in Republic Srpska
Issuing licenses for establishment and performance of banks	yes	yes	no	yes	yes	yes
Regulation and supervision	yes	yes	yes	yes	yes	yes
Cooperation with other supervisors	yes	yes	yes	yes	yes	yes

5. Possible new organizational structures of banks' regulation system in Bosnia and Herzegovina

Bosnia and Herzegovina must reorganize the banks' regulation and supervision system. There are two possible solutions:

1. establish unique Banking Agency on state level for regulation and supervision of all banks in Bosnia and Herzegovina which will be coordinated with Central bank of Bosnia and Herzegovina (umbrella system) or
2. function of regulation of banks remove from the entities banking agencies to the Central bank of Bosnia and Herzegovina, on that way the process of regulation and supervision of banks in Bosnia and Herzegovina will be closer to practice in other transitional countries and European Union.

The financial system of Bosnia and Herzegovina is so thin and isn't realistic to expect establishing unique supervision on all financial institutions in the financial system but it's important to make good quality system of regulation and supervision on banking system which is the base of the BH financial system.

Advantages of integrated model of regulation banking system on all territory of Bosnia and Herzegovina are:

1. possibility of regulation and supervision banks on all territory of Bosnia and Herzegovina
2. economies of scale
3. economies of scope (one database, unique roles and procedures for all banking system)
4. increase supervisory accountability.

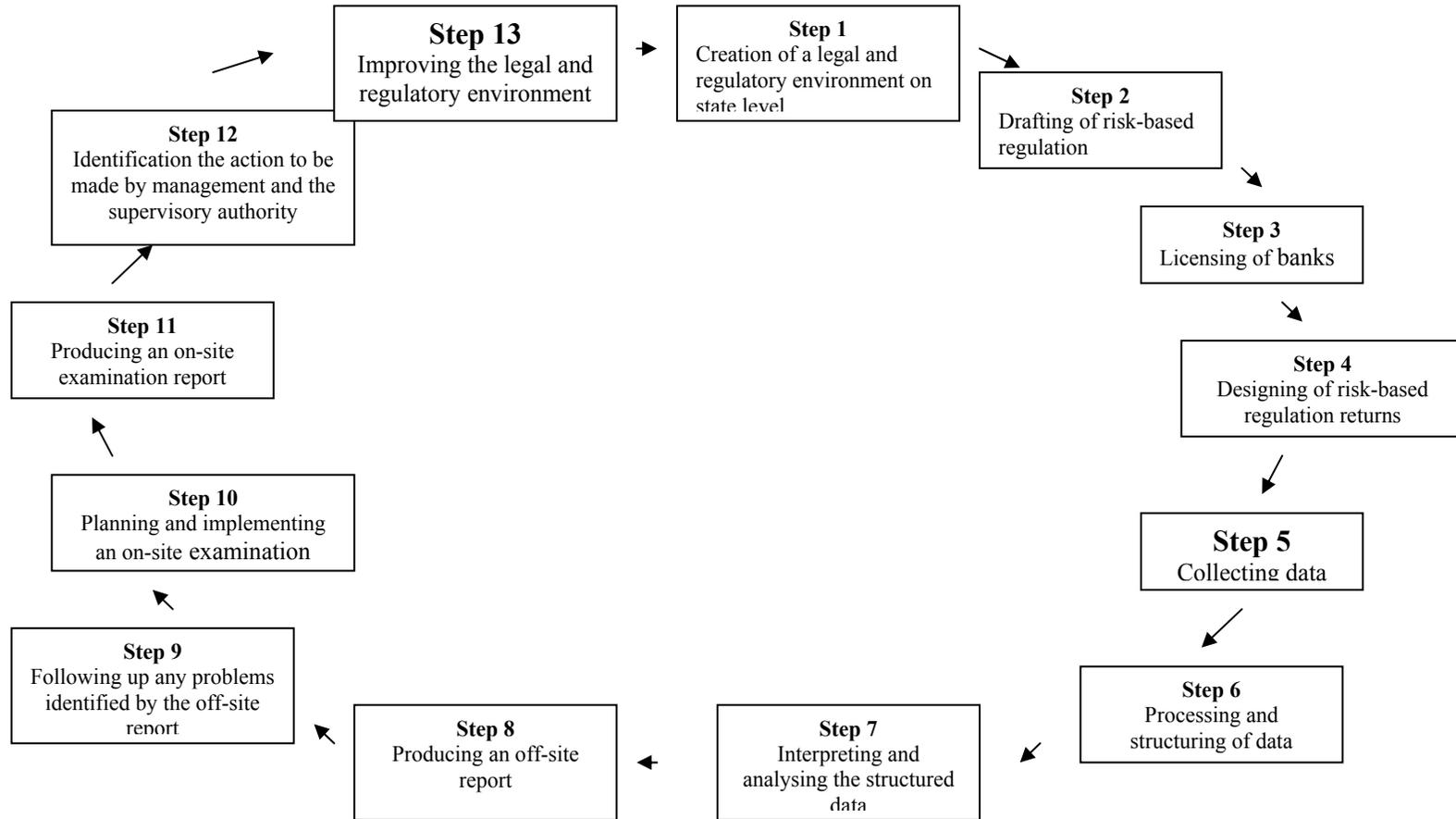
Typical problems in establishing new organizational model of bank's regulation and supervision are:

1. legal constraints – entities governments must change legislations for each banking sector in Bosnia and Herzegovina (bank's laws, laws of banking agencies) which regulate banking
2. departures of experienced personnel – reallocation of personnel and define new roles
3. create integrate IT system, network for new model
4. demoralization of staff of the merged entities
5. identification of strategy plan, mission and aims in new organizational model
6. budgetary problems.

For those showed models of possible organizational forms in regulation and supervision system Bosnia and Herzegovina must have political consent between political parties of two BH entities.

Unique system of regulation and supervision for banks and their branches and affiliates on territory of Bosnia and Herzegovina without barriers on entities level demand unique stage whereby the results of one stage serve as inputs of the next. The final aim of this process is safe, sound, and properly functioning financial intermediation. Figure 3. summarizes the stages of regulation and supervision process.

Figure 3 The stages of unique bank' supervision and regulation in Bosnia and Herzegovina



Source: adopted from Greuning, H., Brajović, S., Analyzing and Managing Banking Risk, The World Bank, Washington, USA, pp. 300

6. Conclusion

Banking industry a recent years in Bosnia and Herzegovina has experienced change. Banks have much more flexibility on the service, which they offer. Many banks offer new services to their clients, banks expanded across the country by opening new branches or making acquisition in an attempt to use their resources efficiently. Those changes in banking industry of Bosnia and Herzegovina are normal trends for the banks in the world.

But on the other side in Bosnia and Herzegovina system of banks' regulation and supervision isn't appropriate. In Bosnia and Herzegovina has been existed two separate and independent entities banking agency while don't exist a regulator for complete banking system on all territory of Bosnia and Herzegovina. Existing organizational structure of bank' regulation and supervision make problems as: two separate regulation systems, two different banking laws, two different supervision procedures and etc. All these problems force authorities to make reorganization of banks' regulation and supervision system.

There are two possible solutions: establish unique Banking Agency on state level for regulation and supervision of all banks in Bosnia and Herzegovina which will be coordinated with Central bank of Bosnia and Herzegovina (umbrella system) or function of regulation of banks remove from the entities banking agencies to the Central bank of Bosnia and Herzegovina. Both models for their implementation need change in legislations, IT systems and solution of problem in financing new organization structures. Political consent of major political parties in Bosnia and Herzegovina is also important.

References

- [1] Central bank of Bosnia and Herzegovina, *Annual report 2005*, Access from: <http://www.cbbh.ba/en/index.html>
- [2] European Central Bank, *Developments in National Supervisory Structure*, June 2003.
- [3] GREUNING, H., BRAJOVIĆ BRATUNOVIĆ, S. *Analyzing and Managing Banking Risk*. The World Bank, Washington, USA, 2003, ISBN 0-8213-5418-3
- [4] HANKE, S., SCHULER, K. *Currency Board for Developing Countries – A Handbook*, Institute for Contemporary Studies. San Francisco, USA, 1994, Access from <http://www.users.erols.com/kurrency/icegrev.html>

- [5] Law in the Banking Agency of the Federation of Bosnia and Herzegovina, the Official Gazette No. 9/96, 27/98, 20/00 and 45/00.
- [6] Law on Banking Agency of Republic Srpska, the Official Gazette of Republic Srpska No. 10/98, 16/00, 18/01, 71/02, 18/03, and 39/03.
- [7] Law on Banks, the FBiH Official Gazette No. 39/98, 32/00.
- [8] Law on RS Banks, the Official Gazette of RS No. 44/03.
- [9] SOUNDERS, A. *Financial Institution Management – A Modern Perspective*. McGraw Hill, Boston, USA, 1999, ISBN 0-07-116985-7.
- [10] MISHKIN, S. F. *The Economics of Money, Banking and Financial Markets*, 7th ed.: Person Addison-Wesley, Boston, USA, 2004, ISBN 0-8213-5465-5.

THE BALANCE SHEET STRUCTURE AS THE EXPRESSION OF THE ECONOMICAL STATE OF THE BANK

Jan Černohorský

University of Pardubice
Faculty of Economics and Administration
Department of Economics
Studentská 95
532 10 Pardubice
Czech Republic
e-mail: jan.cernohorsky@upce.cz
telephone: +420 466 036 477

Abstract

The aim of this paper is to define the main differences in the balance sheet structure of failed banks and operating banks in the Czech Republic. The analysis was provided on data from balance sheets and profit and loss statements that were published in the bank's annual reports since 1995. Only universal commercial banks in the Czech Republic are the subjects of conducted research. The selected banks are divided into two groups – failed banks and operating banks. The analysis is aimed at financial relations of the banks with other banks (characterized by two balance's items: receivables from banks and liabilities to banks). In the next step the analysis focuses on financial relations of the banks to clients (characterized by two balance's items: receivables from clients and liabilities to clients). The main differences in a structure of assets and structure of liabilities are defined and graphically interpreted in this paper. The recommendations concerning the balance sheet structure of the analyzed banks are the main result of provided research.

Keywords: bank, assets, liabilities

1. Introduction

The monitoring of our banks' economical situation was increased when the Czech Republic joined the common market of the European Union. Billions Czech crowns flow through our banking sector. Many banks were in financial lost and huge sums of non quality receivables were taken to the Czech consolidation agency in spite of this fact. Why? We can find the answers in the banks' economical figures.

2. The steps of analysis

The analysis was based on data from balance sheets and profit and loss statements which were published in the bank's annual reports since 1995. Only universal commercial banks in the Czech Republic are the subjects of conducted research. We are not considering the subsidiaries of foreign banks and the specialized institutions: the mortgage banks and the Českomoravská záruční a rozvojová banka, Česká exportní banka and the former Konsolidační banka. Only universal commercial banks, which are significantly focused on the offer of all types of commercial and investment products, are subject of our interest. We do not take into consideration the specialized banks which have a little different object of activity, the purpose of existence and the gain of the financial resources.

Another step was distribution of the banks into two groups - failed banks (the banks which bankrupted in the period 1995 – 2004) and operating banks (the banks which are still running). We considered following total number of banks, number of operating and failed banks in the individual years of analysis.

Table 1 The number of banks considered in the analysis

	1995	1996	1997	1998	1999	2000	2001	2002
Operating	16	17	19	19	18	17	15	15
Failed	20	8	7	5	4	2	0	0
Total	36	25	26	24	22	19	15	15

Source: Author's calculation based on the facts from the Bank supervision of CNB

We recalculated the data included in balance sheet on the percentage values for every bank in the next step. The percentage value shows the share each balance sheet item on the assets and on the liabilities. We calculated the arithmetic average for both groups operating and failed banks for each year considered in the analysis from percentage values. We have data from failed

banks until 2000. The licenses of the Plzeňská banka and the Union banka were taken away in 2003 but the balance sheet data are not public accessible in 2001 and 2002. We operate with these calculated data in this paper.

3. Presentation of results

We show the most substantial differences between failed banks and operating banks during analyzed years at first. It is especially about the business with banks and non financial clients. It is valid for following text where we consider the average values for operating banks and the average values for failed banks in each year.

3.1 The relation to other banks

The most substantial differences in the balance sheet structure between operating and failed banks are shown in the items which express the relation to other banks in the banking sector. It is about the receivables from banks in assets and about the liabilities to banks in liabilities.

The difference between average operating bank and average failed banks fluctuates in individual years in the interval 10 – 30 % in case of the share of receivables from banks on assets. The lower difference is shown in the last analysis years. The difference is even more in interval 20 – 35 % in case of the share of liabilities to banks. Here it is valid that this difference is raising during analyzed years.

It is valid that operating banks used as the source of financing the deposit from other banks in bigger scale. In other words some banks deposited their free financial sources to these operating banks. The higher trustworthiness of these banks on the interbank market can be the reason of it. And it is valid that the operating banks deposited a bigger amount of their free financial sources at the small risk rate to other banks than failed banks at the same time. So their behavior was more cautious.

We show the development of the proportion by the liabilities to banks in detail. The values of this indicator for operating banks are influenced by a big measure by the foreign banks values. Approximately the half of them had their sources made by more than 50 % by liabilities to banks till the year 1998 and the rest of the banks from this group usually did not drop under the 30 % boundary in values of this indicator. The change in banks' behavior has come since the year 1999.

The banks started to rid their deposits from other banks and tried to invest their free financial sources into the more profitable instruments. The

result is that the proportion between liabilities to banks and liabilities is under 20 % by majority of banks from this subgroup of operating banks till the end of the year 2002.

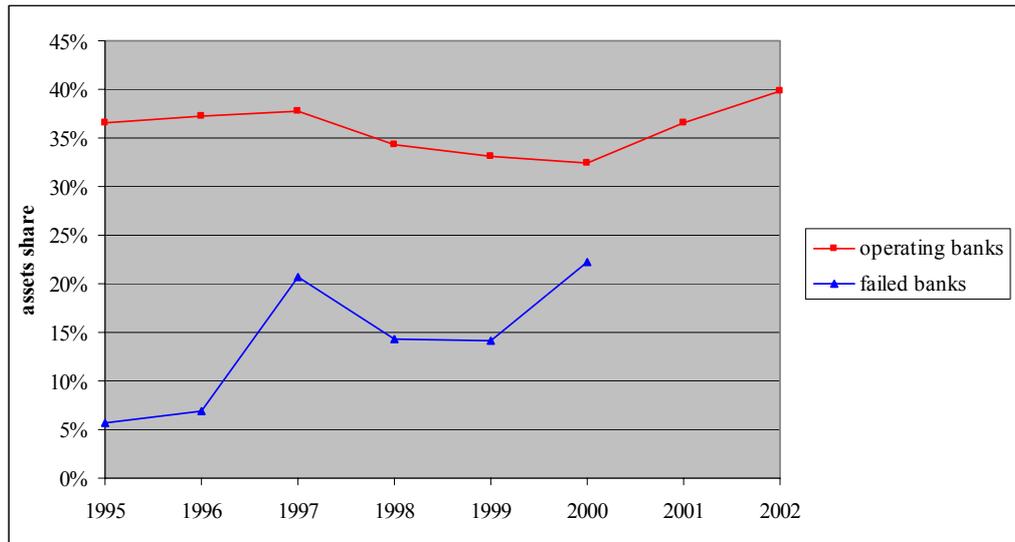
This proportion fluctuated by big banks till the year 1999 (by KB - except one year - usually slightly above 20 %, by CSOB about 30 % and by ČS between 8,5 and 12,5 % - the saving tradition of this institution was shown there). Since the year 2000 we can see the same trend as by the previous subgroup of international banks in the process the proportion decreasing of the liabilities to the banks to the liabilities. One of the most important reasons for it was the decrease of the interest rate. Till the end of the year 2002 these banks hold the deposit from other banks in the level of 5 – 8 % of the liabilities.

In the group of failed banks is clear the trend of decreasing the proportion of the liabilities to the banks thereby how this group bank gradually comes near to bankruptcy. This trend is confirm by the biggest bank from this group – IPB, whose value of the indicator dropped from 29,3 % in the year 1995 to 8,2 % in the year 1999, and further The Union banka (from 22,4 to 5,7 % in the year 2000). The special case is the Plzeňská banka which in last four years did not have any liabilities to the banks this means its indicator was 0 %. The majority of these banks from this group were moving around the average value as mentioned in the graph. The exceptions when the banks had more significant proportion were following: Česká banka and Realitbanka in the year 1995 (54,7 % and 42 %), Zemská bank in the year 1996 (69,9 %) and Pragobanka in the year 1996 and 1997 (25 % and 23,7 %).

From above mentioned it is clear that the bankrupting banks are less engaged in the interbank market. The cause can be that on the interbank market the banks' troubles can be seen usually much earlier than the public is informed and for other banks are these banks aiming to the bankruptcy less trustworthy than other banks.

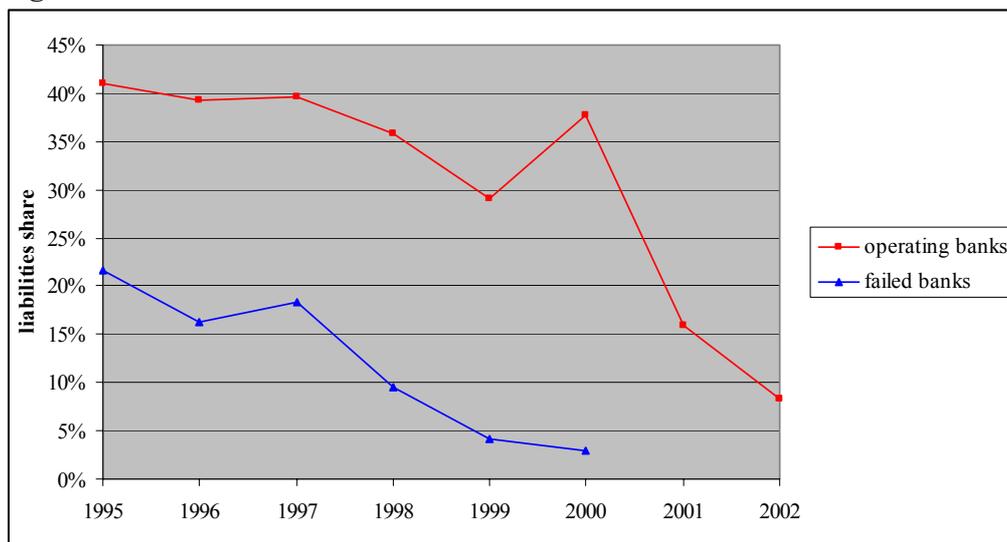
The average values for both these items for given groups of banks are shown in the following graphs.

Figure 1 Receivables from banks



Source: Author's calculation

Figure 2 Liabilities to banks



Source: Author's calculation

3.2 The relationship to the clients

In this view is shown the more significant difference especially by the liabilities to the clients – this is the clients' deposits by banks. The significant differences between the properly operating and the failed bank in the interval

17 – 35 % are demonstrated till the year 1998. We can explain this by important fact that until this year almost all small banks bankrupted. These banks attracted their clients on the high deposit interest rate. In the year 1999 we have in our analyses just four failed banks, where the Haná Banka had restricted its banking activity and this indicator was just 0,01 %. The indicator for the Plzeňská banka was moving lower than by the properly operating banks and the rest of two failed banks also confirmed their addiction to the clients' deposits (the proportion on the liabilities by the IPB was 68,8 % and by the Union banka was 74,3 %).

On the example of properly operating banks was clearly displayed the trend of the moderate decrease the deposit's proportion on the banks liabilities around 35 % at the first four years and than again the change in the trend and the value of this indicator grew significantly to 60 % in the year 2002. It is valid that some banks achieve up to 70 % of value and the average is put down by banks which put the attention in bigger amount than other banks to the investment banking. In this group the biggest proportion show big Czech banks which traditionally collected the deposits from the petty savers. The lower values are caused by the international banks which did not promise high deposit interest rate as the failed banks.

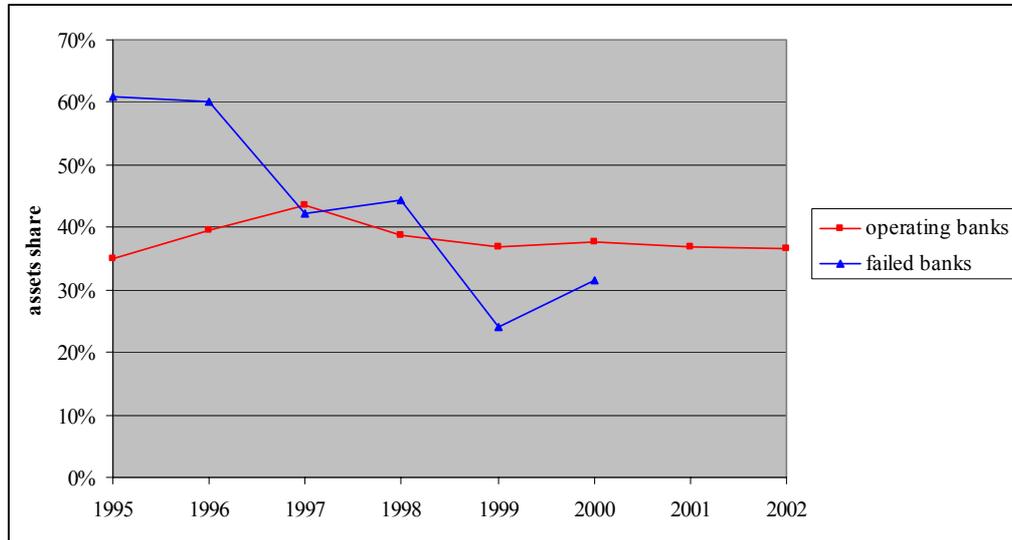
By the receivables from clients is the situation not so simple. During the first two years (1995 -1996) the clients' liabilities by failed banks formed the more significant proportion on the assets than by the properly operating banks. It was again given by a broader being of smaller banks which have to earn to pay the promised higher deposit interest rate by higher and more danger grand of liabilities which was finally fateful for these banks. In the years 1997 – 1998 are the values for both groups in facts similar and in another two years there are lower than by operating banks. This value is very much influenced by existing only four banks near bankruptcy in 1997-98 and only two banks near bankruptcy in the next period, very low amount of given or we can better say not given amount of the liabilities, the liabilities from the Banka Haná (0 % proportion on the liabilities) and the Plzeňská banka (2 %, like 1,6 % proportion on the liabilities). The rest of the failed banks had this indicator higher (IPB around 46 % and the Union banka around 60 % in both years).

As it was mentioned above, it is clear, that the failed banks got involved into the business with non financial clients. Partly they comprised for them the relative higher source of finance than for the operating banks, which searched for the finance at the beginning years of the analysis on the non banking market. In the last years they get more and more involved into the retail banking service, from which flows small individual yield but it is multiplied by the high amount of clients. From the perspective of the

receivables from the clients can be seen, except that the explained exceptions, the relatively higher amount of given liabilities to the liabilities by the failed banks than by the operating banks. The cause was especially the necessity to gain the sufficient finance to pay the promised interest deposit rate.

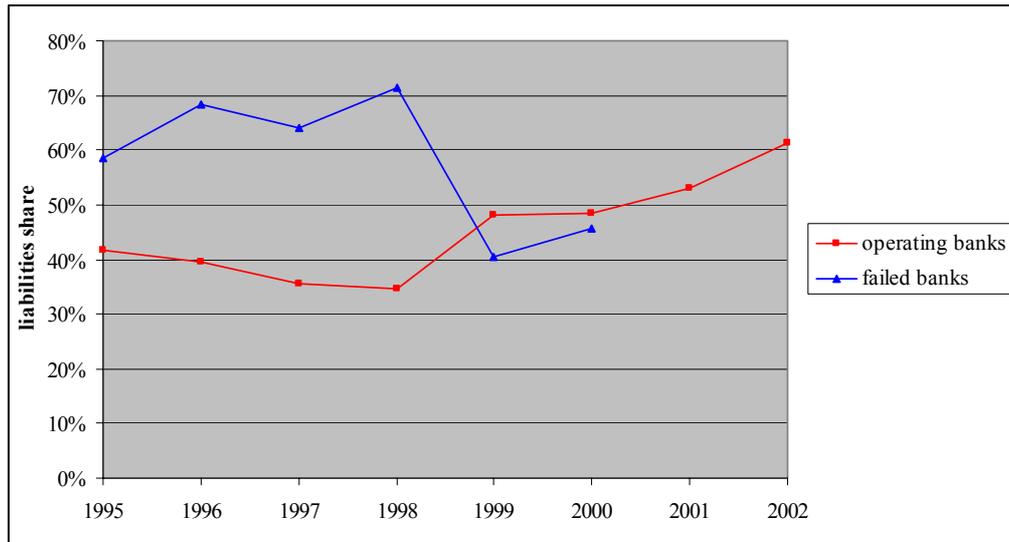
As a summary there are shown the characterized values in following graphs.

Figure 3 Receivables from clients



Source: Author's calculation

Figure 4 Liabilities to clients



Source: Author's calculation

3.3 Other differences

Now we will show briefly other differences between the operating and failed banks. The first difference is the proportion size of the registered capital, which is one of the significant component of the own capital in the liabilities.

By operating banks is the course simple. The average value of this proportion is still around 4 % boundary, while by the failed banks it is more above 10 % boundary and in the last two years even around 45 %. These values are influenced by a small amount of failed banks again and the extreme high values by the Plzeňská banka (82 %) and the Haná banka (106 %), which sign their very low productivity.

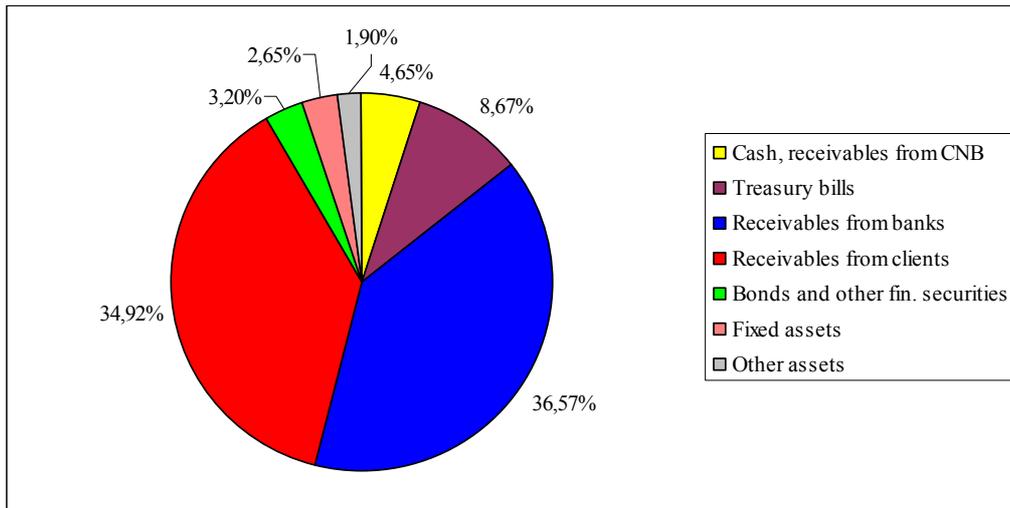
About the differences in this indicator we can say that the failed banks show in average this proportion higher, which present a higher security at the first view but on the other hand the own capital is more expensive than the foreign capital. For sure we have to mention that all banks had to fulfill the safety policy of the Czech National Bank (CNB) and this is the capital adequacy (this means the minimum proportion of own and another specified capital to the risk assets).

The final statement of above mentioned differences is the profit proportion to the liabilities, which is by the failed banks in the years 1995 – 1998 significantly lower than by operating banks and in the first three years it even assumed the minus values. In the last two analyzed years the values for

operating and failed banks evened due to moderate consolidation of the failed banks and due to the fact that the big amount of problematic banks went to bankrupt already.

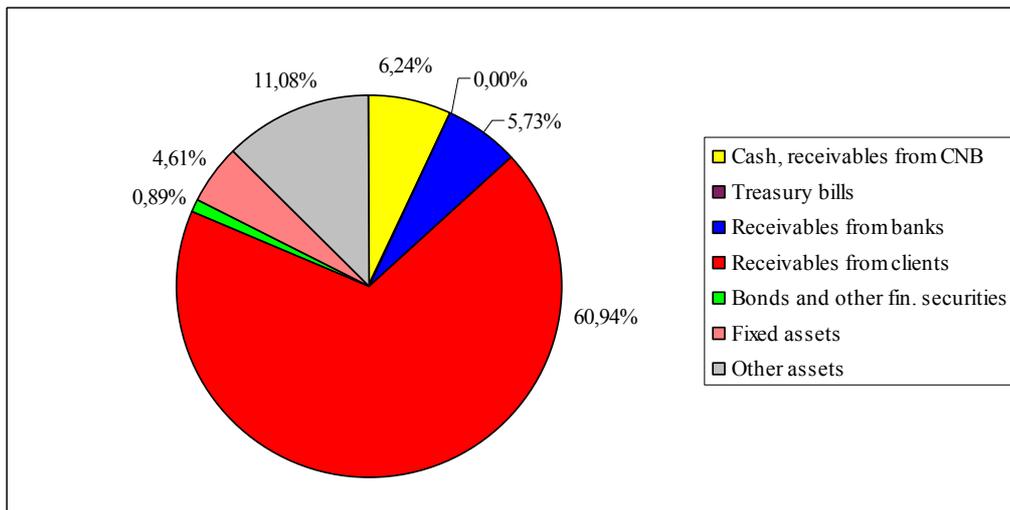
For clearness there are shown the graphs which are showing the structure of balance sheets of the failed and the ordinary operating banks in the year 1995. This year was chosen as an example from this reason, that in this year we have available the highest amount of facts about failed banks. The following graphs confirm clearly the conclusions made above. More to these facts, there is a higher danger by the failed banks which did not buy the short and long term state securities. On the site of the liabilities we mention that by the failed bank the proportion on the earnings to the liabilities goes to the minus value, this is minus 2,47 %.

Figure 5 Assets structure of operating banks



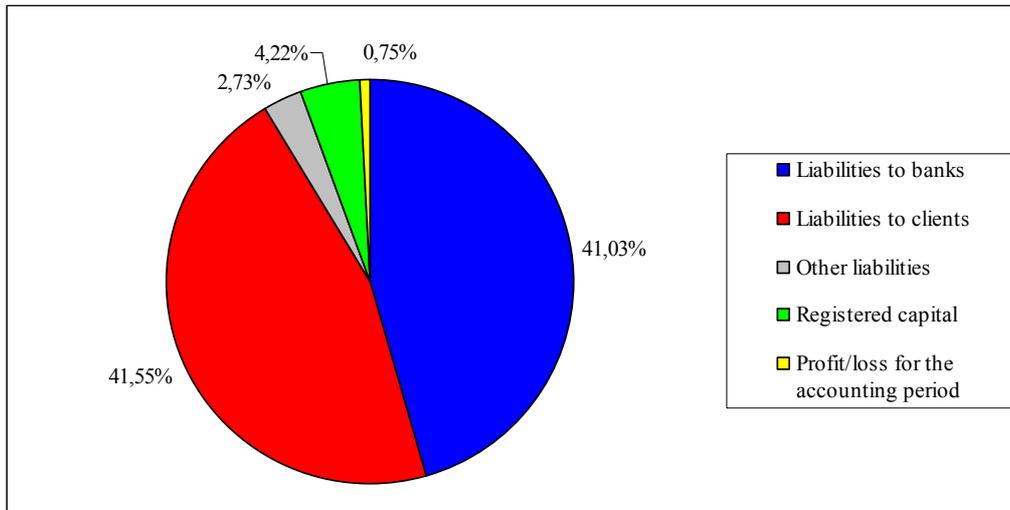
Source: Author's calculation

Figure 6 Assets structure of failed banks



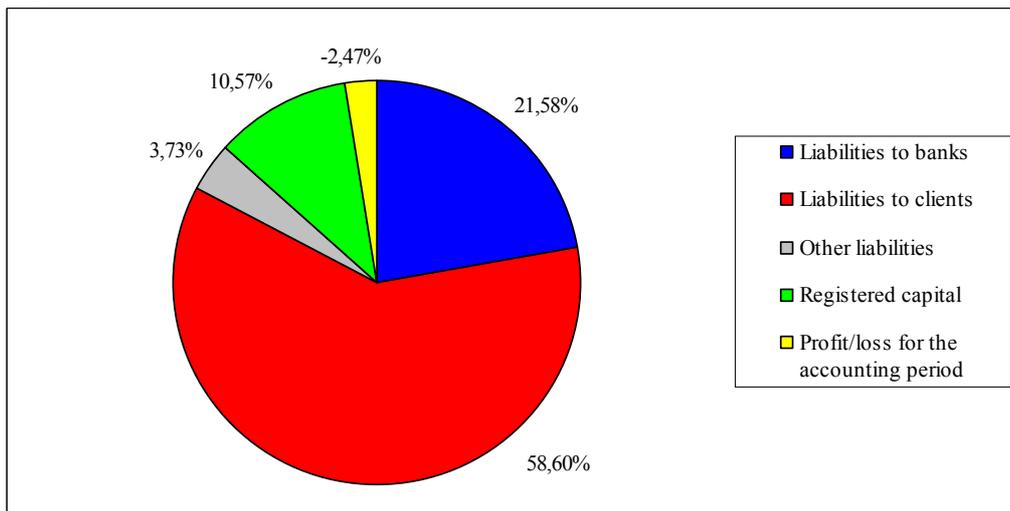
Source: Author's calculation

Figure 7 Liabilities structure of operating banks



Source: Author's calculation

Figure 8 Liabilities structure of failed banks



Source: Author's calculation

4. Conclusion

We proved that during last years there were significant differences in the balance sheet structure between the failed and the operating banks. These differences are shown based on the average values that is why it is not possible by every individual indicator especially not for individual bank to conclude, whether the bank in short period will go bankrupt or not. The values for every bank are influenced by their strategic goals; this is for example according to the retail or investment bank's specification. Anyway we can consider the future development of individual bank based on the long term comparison of the balance sheet structure and all its main items partly in the time and partly with some comparable bank or the group of banks.

References

- [1] *The Annual reports Czech banks since 1995*
- [2] *The Bank supervision CNB*

THE EVALUATION OF BANKING STABILITY BASED ON DISCRIMINANT ANALYSIS

Liběna Černohorská
University of Pardubice
Faculty of Economics and Administration
Studentská 84
532 10 Pardubice
Czech Republic
e-mail: libena.cernohorska@upce.cz
telephone: +420 466 036 452

Abstract

The aim of this paper is to introduce the bank stability model based on discriminant analysis. The model is devised on the basis of financial indicators analysis of selected banking institutions based in the Czech Republic in the period from 1995 until 2003. The banks were divided into two groups – the group of operating banks and the group of bankrupted banks. This division was done according to the real development of the Czech banking sector based on data provided by the Czech National Bank. All banks providing services in the Czech Republic in the period of 1995- 2003 were analyzed in the model except for building societies (due to their different activities compared to commercial banks) and foreign bank's subsidiaries (strongly influenced by their foreign owners). Data for calculation of financial indicators was taken from bank's financial statements, i.e. from the balance sheet and profit and loss statement. Following financial indicators were used for the bank stability model: rentability to average level of assets, equity / liabilities, interest margin, profit/ margin, equity total /assets.

Keywords: *bank, stability, financial indicators, discriminant analysis*

1. Introduction

The banking sector significantly influences economic subjects and its stability is therefore crucial for each economy. The Czech banking sector has seen a sharp development from velvet revolution since 1989. For example, big banks funded manager's leveraged buy-outs and accepted company shares, usually over-priced, as collateral for their loans. In related note, small banks were sometimes founded for financing allied companies or even for financing bank's managers. For these reasons, connection among Czech banks and enterprises was becoming stronger and stronger. Consequently, if a company went bust as a result of acting bank managers, banks posted lower recovery rates from the loans because of value-less collaterals in their portfolios.

Clearly, such conditions did not support company's restructuralization and resulted in losses in bank's books. Therefore plenty of banks went under in the Czech Republic in 1990's and hence the stability of the banking sector was destabilized and the trust of customers in banks dropped (for example collapses of Agrobanka, Union Banka, IPB etc.). It is indisputable that the stabilized banking sector has been built in the Czech Republic in a relatively short period. Despite some pitfalls, the progress towards a higher stability has been made mainly due to new IT technologies, higher-qualified stuff and know-how brought by foreign investors.

The article deals with creating a bank stability model based on the discriminatory analysis made on data obtained by the development of Czech banking sector in the period 1995-2003.¹

2. The Selection of the Financial Indicators

The bank sector has seen fast development in the Czech Republic since 1989. During this development some banks, for various reasons, finished their activity and some of them are working nowadays. Therefore we can suppose that the unstable banks will show different values of financial indicators than the stable (healthy) ones.

The bank is stable if:

- it respects the rule of cautious banks entrepreneurships determined by the CNB;

¹The Altman criteria for Czech banks cannot be used under original conditions, because these criteria were used for the U.S. environment that differs from the Czech one.

- it has not received any financial or other help nor from the state nor the Czech National Bank;
- the value of relevant financial indicators will be moving around the values of the group of stable banks.

The bank is unstable if:

- it was forced to finish its activity for reasons such as taking of the license or forced control or a bank which received any help from the state;
- the value of relevant financial indicators will be moving around the values of the group of the mean value unstable banks.

2.1 Determination of Financial Indicators for Definition the Bank Stability Model

When creating the bank stability model, it was necessary to choose the suitable financial indicators that are different for values of the stable and unstable banks and are uncorrelated at the same time. Using financial indicators varies both in the Czech (see Babouček [1] or Ziegler [23]) and the foreign literature (Golin [9]). Since data comes from the Czech banking sector, financial indicators have been chosen regarding the Czech market features, the Czech accounting standards and information disclosure of the Czech banks.

According to data availability in the Czech banking sector, the financial indicators were chosen.

First of all, we have chosen 9 financial indicators representing all groups of financial indicators.

For rentability analysis following indicators were used:

- return on average level of assets (ROAA);
- return on average level of equity (ROAE);
- interest margin;
- profit margin.

For assets and capital following indicators were taken:

- equity/liabilities;
- equity/total asset.

For loans and claims following indicators were used:

- provisions/total loans.

For liquidity following indicators were considered:

- liquid assets/total total assets;
- liquid assets/ short-term liabilities.

Regarding data availability the financial indicators for the stable banks in the period 1995 – 2003 and the financial indicators for the unstable banks in 1995 – 2000 (in 2001 and 2002 there were no banks without license or under forced administration). The Table 1 shows the number of both stable and unstable banks between 1995 and 2003. All banks providing services in the Czech Republic in the period of 1995 and 2003 were analyzed in the bank stability model except for building societies (due to their different activities compared to commercial banks) and foreign bank's subsidiaries (strongly influenced by their foreign owners).

Table 1 The Development of Stable and Unstable Banks in the Period 1995 – 2003

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003
<i>Number of stable banks</i>	12	13	15	17	16	16	17	17	23
<i>Number of unstable banks</i>	23	11	10	8	7	5	0	0	0
<i>Banks together</i>	35	24	25	25	23	21	17	17	23

Source: www.cnb.cz

The financial indicators were calculated for every bank in given years. Based on these calculations the median for each financial indicator was computed in each year, separately for stable and unstable banks (see Table 2 and Table 3) This statistic indicator was chosen because of its using by rating agencies such as Moody's and Standard & Poor when evaluating bank performance (for instance ROAA, the indicator of bad loans volume etc.). The values of these indicators were calculated for last three years and then compared with the median of the classification group.

The main criteria for creating the model of bank stability were the uncorrelated indicators and simultaneously values of the indicators are different for the group of "stable banks" and the group of "unstable banks" (verified by a graph showing time series of the financial indicators).

Based on the abovementioned criteria the following indicators were selected:

- return on to average level of assets (ROAA);

- equity/liabilities;
- interest margin;
- profit margin;
- equity/total assets ratio.

Table 2 The Financial Indicators for the Stable Banks in the Period 1995 – 2003 (median, in %)

	1995	1996	1997	1998	1999	2000	2001	2002	2003
ROAA	0,69	0,79	0,52	0,33	0,02	0,13	0,58	0,66	1,60
Equity/Liabilities	18,35	18,41	37,10	34,93	19,92	8,35	18,31	11,26	20,68
Profit margin	5,07	8,18	4,80	2,84	0,23	8,24	6,71	12,31	21,56
Interest margin	3,54	2,89	2,00	2,52	3,47	5,31	2,34	1,97	4,05
Equity/Total assets	8,65	8,42	9,30	10,35	8,30	5,83	7,18	6,72	2,05

Source: own calculation

Table 3 The Values of Selected Financial Indicators for the Unstable Banks in the Period 1995 – 2000 (median, in %)

	1995	1996	1997	1998	1999	2000
ROAA	-2,02	-1,30	-0,91	-0,35	0,00	0,13
Equity/Liabilities	9,76	11,28	8,73	7,30	8,62	8,35
Profit margin	-16,69	-7,26	-4,23	-4,38	0,00	8,24
Interest margin	4,69	4,06	4,84	5,48	3,79	5,31
Equity/Total assets	5,66	7,39	5,50	4,91	6,41	5,83

Source: own calculation

3. The Creation of the Bank Stability Model

When applying the discriminant analysis, we calculate values D_1, \dots, D_k for the random quantity X . The investigated element belongs to the group that has the biggest value from values of D_j . Values μ_j and are usually unknown but we have used their estimates. The probability p_j is usually chosen as proportionally to the range of the j -group, if these ranges are unknown, one can choose $p_j = 1/k$. [8].

3.1 The Creation of the Model

Firstly, for creating of the bank stability model it was necessary to calculate values as follows:

- values of medians (\tilde{x}_i) and variances (μ_j) for all indicators for the stable banks in the period 1995 – 2003 (Table 2 and Table 4);
- values of medians and variances for all indicators for the unstable banks in the period 1995 – 2000 (Table 3 and Table 5).

Table 4 Median and Variance for the Stable Banks in the Period of 1995 - 2003

	\tilde{x}_1	μ_1
<i>ROAA</i>	0,0048563	0,0000056
<i>Equity/Liabilities</i>	0,2189823	0,0072530
<i>Profit margin</i>	0,0548787	0,0011690
<i>Interest margin</i>	0,0271371	0,0000327
<i>Equity/total assets</i>	0,0819767	0,0001461

Source: own calculation

Table 5 Median and Variance for Unstable Banks in the Period of 1995 – 2000

	\tilde{x}_2	μ_2
<i>ROAA</i>	-0,0078	0,0001
<i>Equity/Liabilities</i>	0,0883	0,0001
<i>Profit margin</i>	-0,0405	0,0025
<i>Interest margin</i>	0,0469	0,0000
<i>Equity/total assets</i>	0,0589	0,0001

Source: own calculation

The following Tables (Table 7 and Table 8) show the covariance matrix for all financial indicators for both stable and unstable banks. The covariance was counted always for two financial indicators (Table 6).

Table 6 The Covariance of Financial Indicators

	<i>Covariance</i>
<i>ROAA/VkZ</i>	ROAA Equity/Laibilities
<i>ROAA/profitR</i>	ROAA Profit margin
<i>ROAA/interestR</i>	ROAA Interest margin
<i>ROAA/VkA</i>	ROAA Equity/total assets
<i>VkZ/profitR</i>	Equity/Laibilities to profid margin
<i>VkZ/interestR</i>	Equity/Laibilities to interest margin
<i>VkZ/interestR</i>	Equity/Laibilities to interest margin
<i>profitR/interestR</i>	Profit margin to interest margin
<i>profitR/VkA</i>	Profit margin to equity/total assets
<i>interestR/VkZ</i>	Interest margin to equity/laibilities

Source: own calculation

Table 7 The Covariance for the Stable Banks

ROAA/VkZ	-4,69E-05	VkZ/profitR	-0,001383	profitR/interestR	-0,00011	interestR/VkZ	4,34E-06
ROAA/profitR	6,47E-05	VkZ/interestR	-0,000132	profitR/VkA	-0,00019		
ROAA/interestR	-4,14E-06	VkZ/VkA	0,0008641				
ROAA/VkA	-3,28E-06						

Source: own calculation

Table 8 The Covariance for the Unstable Banks

ROAA/VkZ	-3,93E-05	VkZ/profitR	-0,00024	profitR/interestR	9,35E-05	interestR/VkZ	-3,8E-05
ROAA/profitR	0,000159	VkZ/interestR	-4,8E-05	profitR/VkA	-9,5E-05		
ROAA/interestR	8,668E-06	VkZ/VkA	8,67E-05				
ROAA/VkA	4,774E-07						

Source: own calculation

From these covariance and relevant variances the covariance matrix for both stable banks and unstable banks was formed (Table 9 and Table 10).

Table 9 The Covariance Matrix for the Stable Bank

5,57402E-06	-4,69329E-05	6,47806E-05	-4,14534E-06	-3,28703E-06
-4,69329E-05	0,0073	-0,001383891	-0,000132073	0,000864155
6,47806E-05	-0,0014	0,001169002	-0,000110747	-0,00019043
-4,14534E-06	-0,000132073	-0,000110747	3,2653E-05	4,3434E-06
-3,28703E-06	0,000864155	-0,00019043	4,3434E-06	0,000146118

Source: own calculation

Table 10 The Covariance Matrix for the Stable Bank

6,68628E-05	-3,93E-05	0,000159	8,67E-06	4,77E-07
-3,9335E-05	0,0001	-0,000245	-4,8E-05	8,67E-05
0,000159048	-0,0002	0,0024824	9,35E-05	-9,5E-05
8,66815E-06	-4,8E-05	9,349E-05	3,72E-05	-3,8E-05
4,77369E-07	8,67E-05	-9,45E-05	-3,8E-05	6,59E-05

Source: own calculation

When providing the discriminant analysis, we have to compute also the inverse covariance matrix for both stable and unstable banks.

Table 11 The Inverse Matrix for the Stable Banks

2126992,441	-90435,8851	-292904,0054	-1120348,535	234265,356
-90435,8851	6592,712885	16081,02127	72682,29792	-22226,9847
-292904,005	16081,02127	46844,25794	192906,3881	-46377,4091
-1120348,53	72682,29792	192906,3881	867160,3557	-229421,127
234265,356	-22226,9847	-46377,40909	-229421,1269	89943,67727

Source: own calculation

Table 12 The Inverse Matrix for the Unstable Banks

194796,9	280783,4255	3765,64	-157076,6921	-455425,584
280783,4	447849,4933	7829,9	-237793,3628	-716245,36
3765,639	7829,895835	651,563	-4801,886961	-12146,7733
-157077	-237793,3628	-4801,89	197508,4257	420401,3645
-455426	-716245,3596	-12146,8	420401,3645	1184296,957

Source: own calculation

Then we calculated determinant of the inverse covariance matrix D_j . The value of D_j for a particular bank is calculated as follows:

$$D_1 = -0,5 \cdot \ln[\det(\sum_1)] - 0,5 \cdot (\tilde{x} - \mu_1)' \cdot \sum_1^{-1} \cdot (\tilde{x} - \mu_1) + \ln p_1 \quad (1)$$

The size D_2 for a particular bank equal:

$$D_2 = -0,5 \cdot \ln[\det(\sum_2)] - 0,5 \cdot (\tilde{x} - \mu_2)' \cdot \sum_2^{-1} \cdot (\tilde{x} - \mu_2) + \ln p_2 \quad (2)$$

The final result is to set up a model that enables forecasting the classification of a particular bank to the concrete group of banks (either into the first group of the stable banks or into the second group of the unstable banks) based on provided calculations. A particular bank will belong to the group of either stable or unstable banks on dependence of the value of D_j (the bank will be placed to the group where it reaches the bigger value of D_j).

The original intention of the model of bank stability was to create so called “a grey zone” or the situation when it will be not possible to rank the chosen bank neither to the group of the stable banks nor unstable banks. Considering that banks are divided only into two groups in the model when applying the discriminatory analysis, no grey zone is used here.

In case that the relevant average variance was subtracted from the median of the financial indicator (valid in the Cartesian product) for the group of stable banks and unstable banks, it would lead to a creation of two intervals (for the group of stable or unstable banks). The interval would rise in both cases, in the process that inside of these intervals would be the median of the relevant groups of banks. Under condition that the intersection of these intervals would be disjunctive, it would mean that there are different values for the groups of stable and unstable banks. In case that the intersection of these intervals would not be disjunctive, i.e. the intersection exists, it would create an area where the group of stable banks has the same values as the group of the unstable banks.

In the intersection’s interval one cannot determine whether a bank comes of the group of stable or unstable banks. This intersection would be possible to mark as a grey zone, i.e. is the situation when it was not possible to decide into which groups the chosen bank belongs to.

In the calculation of discriminant analysis it is necessary to determine the size of p_j . In this case is not the number of p_j the same as the number of stable and unstable banks in the observed period (see Table 1) for the reason that the measurement of big banks (ČS, KB a ČSOB) was divided into the groups of both stable and unstable banks. The reasoning for such division was the fact that all three banks have received the state support and an entry of a foreign owner. Therefore these banks were ranked as the unstable banks until the year of 2000 and since 2001 they belong to the stable banks.

Table 13 The Number of the Stable and Unstable Banks Used in the Discriminant Analysis Calculation

	<i>The number of stable banks</i>	<i>The number of unstable banks</i>
1995	12	23
1996	14	11
1997	14	11
1998	16	9
1999	15	8
2000	15	6
2001	17	0
2002	17	0
2003	23	0
<i>Banks together</i>	145	66

Source: own calculation

3.2 The Verification of the Model

The bank stability model was verified through 38 banks based in the Czech Republic. It was necessary to exclude the chosen bank from the observe group for verification. Hence the new covariance inverse and transposed matrix was created for every of 38 relevant banks. Furthermore, the number of measurement p_j for every bank was adjusted.

3.2.1 The Identification of Observed Banks

The verification of the suggested model was carried out for 38 banks. 41 measurements were provided because big banks (ČS, KB, ČSOB) were divided into two time intervals until the year 2000 and since the year 2001.

3.2.2 The Verification of Results by Monitoring Bank of the Model

The result of the model was verified in such manner that for every bank the values of the testing criterion D_1 a D_2 were found.

Consequently, the bank was classified into the group of either stable or unstable banks according to the value of testing criterion D_j . Seventeen banks were classified as stable banks and 24 banks as unstable.

Data from the CNB were used for verification of the bank stability model. The CNB presents in the publication “The Bank Supervision 2003” the following overview of the Czech banking sector:

- banks with the valid bank's license;
- banks in the forced administration;
- banks in liquidation;
- banks in bankruptcy proceeding;
- banks as stock companies without the bank license;
- banks in bankruptcy without liquidation;
- banks in bankruptcy with liquidation.

Based on obtained results the comparison between the results from the researched model and the real development of the Czech bank sector was provided.

3.3 The Evaluation the Bank Stability Model

As it comes from our research, the results from the proposed model completely correspond to the real development of the Czech banking sector. The model has classified 17 banks to the group of stable banks and 21 banks to the group of unstable banks. When comparing with real data, this classification fully matches with the real development of the Czech banking sector (see Table 14).

Table 14 The Comparison of the Bank Stability Model with the Real Development of the Czech Banking Sector

<i>Bank group</i>	<i>Total number of banks in group</i>	
	Bank stability model	Real bank development
<i>Stable banks</i>	17	17
<i>Unstable banks</i>	21	21

Source: own calculation, www.cnb.cz

Based on results outlined above one can claim that the bank stability model is able to predict if the chosen bank belongs either to the group of the stable or to the group of the unstable banks. Since data used in the model is public available, the model can be used by any economical subject for its decision process when choosing a bank for its financial transactions.

4. Conclusion

The proposed bank stability model was verified on the selected banks doing business in the Czech Republic in the period 1995 – 2003. However, the verification could not be done on all the banks doing business in the Czech Republic in this period of time. The reason was data unavailability for an analysis of all needed financial indicators.

The bank stability model was created on the basis of the discriminant analysis. The discriminant analysis includes five financial indicators that help to classify a bank either into the group of the stable banks or unstable banks. The model was drawn up by using 211 measurements, thereof 145 measurements were connected to the stable banks and 66 measurements were connected to the unstable banks. The classification of a bank to the stable or unstable group fully corresponded to the facts published by the Czech National Bank.

The choice of the financial indicators was influenced by data availability. The original intention included 11 financial indicators for providing the discriminant analysis. However, we had to decrease the number of financial indicators because of an uncorrelation of financial indicators requirement. Therefore the number of indicators was cut from 11 to 5 indicators. The choice of these five financial indicators was also supported with the results of the financial analysis and through a graph describing time series of these financial indicators.

The verification of the model shows the practical usage for evaluation of the bank stability. The results verification was done for 41 banks in total, thereof 24 banks were clarified as the stable banks and 17 banks as the unstable banks. The used classification fully matches with the real development of the Czech banking sector.

References

- [1] BABOUČEK, I. Analýza a hodnocení finanční situace banky na základě veřejně přístupných informací. *Bankovníctví*. 1996, č. 13, roč. 4, str. 21-28.
- [2] BLAHA, Z. S., JINDŘICHOVSKÁ, I. *Jak posoudit finanční zdraví firmy*. Praha: Management Press, 1996. ISBN 80-85603-80-2.
- [3] ČNB. *Zpráva o stabilitě bankovního sektoru*. Výzkumná zpráva (leden 2004). Praha: ČNB.

- [4] ČNB. *Česká národní banka 1993 - 2003*. Výzkumná zpráva (leden 2004). Praha: ČNB.
- [5] ČNB. *Bankovní dohled*. 1. vyd. Praha: ČNB.
- [6] GOLIN, J.: *The Bank Credit Analysis Handbook: a guide for analysts, bankers and investors*. Singapur: John Wiley & Sons, 2000. ISBN 0-471-84217-6.
- [7] KOTRBA, J., ŠVEJNAR, J. *Rapid and multifaced privatization, Experience of the Czech and Slovak Republic*. Výzkumná práce. Praha: Univerzita Karlova – Cerge, 2002.
- [8] KUBANOVÁ, J. *Statistické metody pro ekonomickou a technickou praxi*. Bratislava: Statis, 2003. ISBN 80-85659-31-X
- [9] MEJSTRÍK, M. *The Privatization Process in East – Central Europe Evolutionary Process of Czech Privatization*. Dordrecht: Kluwer Academic Publisher, 1997. ISBN 0-7923-4096-5
- [10] SEGER, J., et al. *Statistika v hospodářství*. Praha: ETC Publishing, 1998. ISBN 80-86006-56-5
- [11] TEPLÁ, L. Problémy stabilizace bankovníctví v ČR. *E+M Ekonomie a Management*. 2001, roč. IV, s. 14-18.
- [12] ZIEGLER, K., et al. *Finanční řízení bank*. Praha: Bankovní institut, 1997. ISBN 80-902243-1-8

SEGMENTED ANALYSIS OF BANKING INFORMATION¹

August Aarma

Tallinn University of Technology
School of Economics and Business Administration
Department of Economics
Kopli 101
11712 Tallinn
Estonia
e-mail: august@tv.ttu.ee
telephone: +372 620 40 51

Abstract

A bank's activities produce banking information. It consists of outwards-directed (outside) information and internally used (inside) information. The information sent outside to banking regulation institutions and general public according to the law differs substantially from the information used internally by the banks. Various information users, such as shareholders, owners, competitors, government, etc. use some kind of banking information. The bank information for the public consisting of monthly balance sheets and quarterly income statements is analysed. The type and quality of the information requested by different information users and possibilities of finding the requested information from the above-mentioned data sheets are discussed. The paper presents a possible classification of banking information analysis and gives, as an example, methods for one of the variants of analysis.

Keywords: *banking information, banking consumers, banking analysis*

¹ Support of the Estonian Science Foundation (Research Project 5185) is acknowledged by the author. The views expressed in the paper are entirely those of the author and in no way represent the views of the Foundation.

1. Introduction

In the Republic of Estonia all companies have given up salary payments in cash. Monthly salaries are transferred to a bank by the employer and from there the money may be withdrawn either by visiting the bank office (and paying a fee for the operation) or via ATM (currently in some banks still free of charge). Increasingly more students and retired persons are using ATMs.

The primary interest of all bank clients is that their money be safe. Only after this has been achieved, people think of making a bit more money by changing their ordinary accounts into time deposits. The fear of losing one's money derives from the recent time when quite a number of banks closed their doors all of a sudden. These closings were unexpected because on previous days the bank had performed all operations without obstacles and therefore nobody could predict that the next day the doors would be closed and the customers would lose their money. Although we may blame the depositors of not dividing their risk (as a proverb warns, one should not keep all eggs in one basket), it would mean being wise only afterwards and it will not bring back the lost savings. Having lost your money once, you'll be more careful while choosing your bank next time. It is a rule with exceptions. Nevertheless, there are cases when a person has experienced three bankruptcies of his/her chosen home bank in sequence. Quite often one failure has been enough to teach a lesson. All these bankruptcies have heavily damaged the image of the banking system among Estonians.

The banks try to create an image of credibility. They erect fancy office buildings and their employees are trained to communicate in a trustworthy way with customers etc. All this belongs to external credibility. It is quite easy to mislead customers with external credibility, but all risks will be wide open once internal credibility is involved. Internal credibility is based on information spread by the bank to the external environment and the results of the analysis of this information. As any other company a bank creates information in the course of its activities. This information can be divided into outside information and information that has to remain between the walls of the bank, i.e. the so-called inside information.

While the external image could help cover the crisis up for some time, the internal image would eventually drag all problems out anyway. By an internal image we mean the result-linked information presented by the bank that allows it to analyse the real situation. Both more experienced and less experienced clients have developed a rather critical attitude towards the Estonian banking system. In addition to an image that banks try to create of themselves through mass media, people have become interested in the real

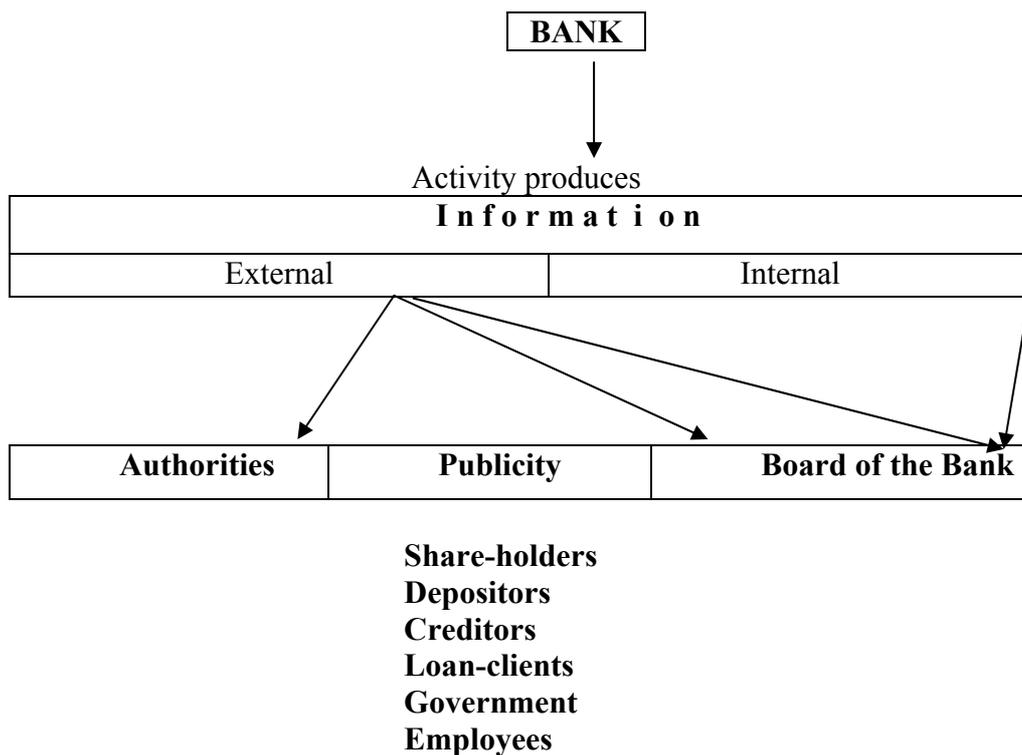
results of the banks. Figures have a unique quality of reflecting mercilessly every bank's health. Having the confirmation of an internationally recognized auditing company the reports gain more trust. The only thing a client has to do then is to read the reports. Unfortunately there are still quite a number of clients unable to understand the reports and to draw conclusions on their basis. Yet there is an obvious need for such a skill.

Discussions with the respondents showed that though everybody would choose a trustworthy bank, they would still describe it only "as a bank that would not end up with bankruptcy". All the banks that have gone bankrupt have never made a public announcement about it before. As a result of bankruptcy hundreds and thousands of people have lost their money and this has made them extremely critical about the banking sector.

2. Different interest-groups of bank clients

Information targeted outside (external information) is used by many institutions and interest groups. Figure 1 gives an overview of them.

Figure 1. Consumers of the Information produced by the Banks



Authorities need information on banks in order to design the government's financial policy. This information is necessary for *investors*, both individuals and institutions, for two purposes. Firstly, in order to decide whether to sell their shares or, on the contrary, to buy more of them. Secondly, to predict a bank's ability to pay dividends.

Depositors are interested in the bank's ability to pay interests and make payments in time.

Creditors are interested in the information about the bank's ability to return loans in time, whilst potential *borrowers* are interested in the information about the conditions of borrowing.

Government agencies need information in order to run national economy and gather statistics.

Bank employees need information in order to evaluate the state of their employer and to be sure that salaries will be paid.

The *public* also needs information. The word "public" includes other members of the community who may be considered as potential customers and competitors.

There are one more institution and a group of people that should be mentioned here. The institution is the Stock Exchange, to which external information has to be passed first, if a bank has been listed at the stock exchange. Information is not passed to the stock exchange on a regular basis; it is passed once it has been born. The group of people are researchers, who have not been mentioned yet. They use only regular information sources and their analysis goes far beyond simple reading of data.

3. Different interest-groups need different information

Next, let us have a look at the information that is essential for evaluating a bank's reliability by different clients.

Regulative institutions (primarily the Banking Supervision Department) control a bank's reliability through its ability to observe necessary regulations (minimum share capital and equity requirements; capital adequacy, liquidity, reserve, and maximum risk requirements). If the annual report shows that all these regulations have been observed, the bank is reliable. Profitability is not important here.

Government agencies (mostly the Department of Statistics) need information purely for statistical purposes. Neither profit nor the

observance of the regulations are of their interest. Small depositors are interested in the interest rate.

In addition to reliability *investors* are also concerned about profitability. The term “investors” includes core investors, long-term shareholders as well as speculators. In the annual report they are interested in the bank’s performance, and based on that they either sell their shares or buy some more.

Competitors and *researchers* need more specific information. The published information is insufficient for them, as they have to analyse the balance sheet and income statement very thoroughly.

The most precious good of every bank is its reliability. Knowing the recent history of Estonian banking (Fleming, Chu and Bakker 1997; Vensel 1997; Aarma and Vensel 1998; Sõrg 1999) it is not difficult to explain why the bank customers regard reliability as the most important criterion in their selection of the bank (Aarma 2001). The cornerstone of reliability is openness. This means that everyone who needs or wishes information on the bank’s activities has to have access to it.

Besides reliability, earning a profit and its sufficient size are preconditions for a normal operation and growth of each bank. Information on profit is provided by the profit statement published quarterly. All groups who consume information provided by the bank are interested in the bank’s reliability but its profit-making capacity does not concern some of them. This is illustrated by Table 1.

Table 1 Groups that care (do not care) about the reliability and profitability of the bank

<i>Group of bank information consumers</i>	<i>Reliability</i>	<i>Profitability of the bank</i>
<i>Regulatory organs</i>	Yes	No
<i>Government institutions</i>	Yes	Yes
<i>Depositors</i>	Yes	Yes/No
<i>Borrowers</i>	Yes	Yes/No
<i>Investors</i>	Yes	Yes
<i>Bank employees</i>	Yes	Yes
<i>Bank management</i>	Yes	Yes

Source: Aarma 2001

The reliability of a bank is also understood differently by each group of information consumers. Regulatory organs and government institutions understand bank reliability as the correspondence of its performance indicators to the set standards. For depositors reliability is in the first place its cash position. If the bank is liquid its deposit holders will have no obstacles to withdrawing their money at any time they wish. For borrowers the bank is reliable if it is capable of lending money. No specific relationships can be found between the rate of interest on loans and bank reliability. Investors consider the bank reliable if they can be sure that the money they have invested will produce for them as high profits as possible (either in the form of dividends or rising price of shares). Bank employees and management are primarily interested in the fact that the bank is reliable and that the reliability increases continuously. The welfare of both these groups depends directly on the reliability of their bank.

As to profit-making capacity, the situation is somewhat different. There are interest groups who do not care at all whether the bank makes or profit or not. First of all it is the regulatory organs that are not interested in the bank's capacity to make a profit. Depositors and borrowers do not care much about it either. The investors and the bank's own employees, on the contrary, are vitally interested in whether the bank makes or profit or not. The government is likewise interested in the bank's profit as it collects taxes on the profit.

It was mentioned above that the most important reports of a bank are its balance sheet and profit statement. Still, to be quite exact, it should be said that it is the audited annual report that is the most important. The balance sheet and profit statement are its major components. As the balance sheet and profit statement presented in the annual report are the only audited ones of the balance sheets and profit statements published during a year, the most authentic overview of the bank could be obtained if we analysed only the balance sheets and profit statements in the annual reports. However, this would be insufficient as the time series with a time interval of one year would be too short. Therefore, the time series has to be lengthened and to do so the time interval will be shortened to embrace three months. The use of an even shorter time interval (for example one month) is hindered by the fact that the profit statement is presented once in a quarter.

Thus, by losing some trustworthiness of data (the quarterly balance sheets and profit statements are not audited and may be changed later) we can get a sufficiently long time series to make conclusions.

There does not exist any classification of banking information accepted unanimously by all authors involved in banking analysis. Each

author approaches the analysis from their own aspect. The classification of analysis presented in Table 2 is also a subjective vision of the author and is a combination of approaches of several other authors (Koch 1995; Panova 1996; Batrakova 1998, Aarma 2001, Vensel 2001,).

Table 2 Classification of banking information analysis

<i>1. Based on the interval of studies</i>	<ol style="list-style-type: none"> 1. Monthly 2. Quarterly 3. Semi-annual 4. Annual
<i>2. Based on methods applied</i>	<ol style="list-style-type: none"> 1. Statistical: ratios, indexes 2. Mathematical-economic: correlation and regression analysis, analysis of variance, cluster analysis, factor analysis, interpolation, extrapolation and prognostication of time series 3. Econometric models
<i>3. Based on thoroughness and scale of analysis</i>	<ol style="list-style-type: none"> 1. Primary (express analysis) 2. Comparative-analytical 3. Factor analysis 4. Comprehensive analysis 5. Econometric modelling

Source: The author's vision

4. Selection of the methods of analysis depends on the bank client's interest and needs

As already mentioned above, the bank clients' primary interest is that their money be safe. This means that the bank at which they keep their money should be credible. Estonian legislation is in this respect of great help to bank clients. Namely, the Deposit Backing Act from 1st October 1998 guarantees 90% of small depositors' accounts. When the Act was passed the upper limit of the guaranteed deposit was EEK 20 000 and the level of self-

responsibility was 10%. By the beginning of 2005 the guaranteed amount had been raised to EEK 200 00 and by the end of 2007 it has to be EUR 20 000.

Bank clients who either do not wish or are not able to analyse the information published by the bank may use the ratings prepared by others. There are a large number of methods for rating banks and they differ from each other significantly.

The most trustworthy ratings are naturally the ones published by large international rating companies such as Moody's Investors Service, there is no sense in discussing their methods, as they require from the banks such information that is normally not available to the general public. Such rating methods are CAMEL, CAEL, UBSS, FIMS etc.

Those bank clients who prefer to make their own decisions about the credibility of the bank on the basis of the information published by the bank have at their disposal a number of analyses (see Table 2).

The methods listed in the table differ from one another in complexity. Several research papers have been published concerning the most complex analysis methods. For example, the matrix approach (Aarma and Vensel 1999), comparative analysis (Aarma and Vensel, 2000), DuPont Financial Ratio Analysis (Aarma 2001), econometric modelling (Aarma and Vainu 2003) have been discussed.

In the present paper a simple analysis method is treated. This method is one possibility of rating banks. A Moscow economist G. Panova (Панова, 1996) may be considered the author of this method. The method evaluates the potential chances of the bank on the market. The rating is calculated on the basis of six ratios:

1. coefficient of the credibility (K_1)
book value equity (BE) / earning assets (EA) (1)
2. coefficient of current liquidity (K_2)
liquid assets (LA) / demand deposits (DD) (2)
3. coefficient of risk (K_3)
liabilities (L) / (EA) (3)
4. coefficient of liquidity (K_4)

$$(LA + \text{protected capital}) / (L) \quad (4)$$

Under protected capital we refer to the bank's capital assets minus intangible assets plus capital investments and precious metals

$$5. \quad \text{coefficient of protected capital (K}_5\text{)} \\ \text{protected capital} / (\text{BE}) \quad (5)$$

$$6. \quad \text{coefficient of profit capitalization (K}_6\text{)} \\ \text{BE} / \text{share capital (SC)} \quad (6)$$

If the coefficients of a bank calculated upon the relevant data of the bank are as follows:

$$K_1 = 1; K_2 = 1; K_3 = 3; K_4 = 1; K_5 = 1; K_6 = 3.$$

then the bank's balance can be described as optimal. All these ratios can be divided into two categories, one showing credibility and the other liquidity. The first group includes K_1 , K_3 , K_5 and K_6 and the other K_2 and K_4 . In order to get an overall formula for calculating a bank's credibility, all coefficients are to be put on an equal scale by dividing K_3 and K_6 by 3. However, as every coefficients has a different impact on the bank's performance, they also have to be weighed with a proportional influence factor. The proportional factor on performance of the first group is 70% and the other 30%. Coefficient K_1 , which is of greatest interest to the depositors, has also the greatest weight – 45%, K_2 , showing to bank's ability to satisfy the needs of demand account owners at any time, has a proportional weight of 20%. K_5 , characterizing the protection level of a bank against inflation, and K_6 , showing the level of profit capitalization, have both a proportional weight of 5%. The low importance of K_5 , is due to the fact that buildings and land, which make up the bulk of this coefficient, are periodically revalued. Other coefficients have the following weights: K_3 – 10% and K_4 – 15%.

Thus, the credibility of a bank can be calculates using the following formula:

$$N = \frac{K_1}{1} 45 + \frac{K_2}{1} 20 + \frac{K_3}{3} 10 + \frac{K_4}{1} 15 + \frac{K_5}{1} 5 + \frac{K_6}{3} 5 \quad (7)$$

The banks are ranked according to the credibility rating calculated with this formula. It has to be reminded that every rating is nothing more than

a subjective opinion of experts. Besides, all methods of calculating ratings offer only some assistance in making the decision. The decision has to be made by the owner of the money.

5. Conclusions

1. Different client groups have different expectations of the bank. A deposit account holder is interested in the bank's ability to pay interests and make the payments in time. He is not interested in the profitability of the bank. All bank clients can be grouped based on their expectations of the bank: either its reliability or profitability, or both.

2. Different client groups have different needs for information. A deposit account holder needs information about interest rates and bank charges; a shareholder is interested in the bank's profit, as it directly influences the share price. Competitors need the most specified information.

3. Different methods of analysis produce different types of information. The balance sheet and the income statement include various data. Depending on the depth of analysis the used method becomes more complicated and the result more specified.

4. Panova's rating method enables to rank the banks analysed in the order of credibility using a rather limited amount of information and it is not time-consuming.

References

- [1] AARMA, A. *Segmented Analysis of Bank Customers and Banking Information: the Estonian Case*. Doctoral thesis. Tallinn Technical University, 2001, 194 pp.
- [2] AARMA, A., VAINU, J. *Possibilities of Using Econometric Models in Bank Analysis*. Papers of the Congress of Political Economists (COPE) 14th Annual International Conference presented by Estonian participants, 12-19 July 2003, Mexico City, Tallinn: Tallinn University of Technology, TUTWPE No 04/104-04/199, 2004, pp. 25-31.
- [3] AARMA, A., VENSEL, V. *Estonian Banking System Development 1994-1997*. Papers of the 4th Conference on Financial Sector Reform in Central and Eastern Europe. TTUWPE(BFE) No. 98/12, 1998, pp. 9-27.

- [4] AARMA, A., VENSEL, V. *New Banks' Performance: A Comparative Analysis*. Abstract in: Book of Abstracts, 6th EACES Conference "Globalization and European Integration", Barcelona, 2001 p. 166. (full text published in CD-ROM).
- [5] FLEMING, A., L. CHU, BAKKER, M.R. Banking Crisis in the Baltics. *Finance and Development*, 34, 1, pp. 42-45.
- [6] KOCH, T.W. *Bank Management*. Carolina, The Dryden Press, 465 pp.
- [7] SÖRG, M. *Recurrent Banking Crises in a Transition Economy: Estonian Experience*. The Third International Stockholm Seminar on Risk Behaviour and Risk Management 14-16 June 1999. Vol. of Session IV – Law and Business Risks. School of Business, Risk Research Group, pp. 136-147.
- [8] VENSEL, V. *Banking System Development in Estonia*. In: T. Kowalski (ed.), *Financial Reform in Emerging Market Economies*, Poznan University of Economics, 1997, pp. 141-164.
- [9] VENSEL, V. *Panga analüüs ja finantsjuhtimine*, I. TTÜ, 2001, 130 pp.
- [10] БАТРАКОВА, Л.Г. *Экономический анализ деятельности коммерческого банка*, Москва, 1998, 343 стр.
- [11] ПАНОВА, Г.С. *Анализ финансового состояния коммерческого банка*, Москва, 1996, 272 стр.

INFLUENCE OF INTERNATIONAL INVESTORS TO THE EFFICIENCY OF ESTONIAN COMMERCIAL BANKS

Kaja Lutsoja

Jelena Hartsenko

Tallinn University of Technology

The School of Economics and Business Administration

Department of Economics

Kopli 101

11712 Tallinn

Estonia

e-mail: kaja@tv.ttu.ee; leena@tv.ttu.ee

Abstract

Banking in Estonia has teenager phase. Estonia has experienced two serious banking crises during the about 15-year period of its banking sector development and restructuring, the first crisis in 1992-1994 and the second in 1998-1999. Countries that have undergone financial crises are often looking to stabilize their banks with the help of international investors, often by allowing multinational banks operations to quickly expand their operations. Foreign investment came primarily from Finland and Sweden. In the research, authors are analyzing reasons, how can influence of strong participation of strategic investor from matured economy be related to the efficiency of commercial banks in Estonia in first period (before 1999) and later, when all key players were connected to some Scandinavian commercial bank. Change of efficiency is analyzed through comparison of key measures before and after involvement of strategic investor, in relation with changed regulative environment of Estonia. In more stabilized economic situation, the comparative advantage of involvement of strategic investor has less influence on efficiency and it is analyzed on the basis of Estonian commercial banks reports from 1999-2004.

Keywords: *banking; efficiency; international investor*

1. Introduction

Banks are a unique set of business firms which assets and liabilities, regulatory restrictions, economic functions and operations establish them as an important subject for the study, particularly in the conditions of emerging financial sectors in CEECs. There is a growing interest in the impact of foreign banking on the financial system and the economic development of emerging and transition countries (Naaborg 2004)

A sound banking system is built on profitable and adequately capitalized banks. Modern bankers pay a great deal of attention to the message that is revealed by ratio analysis. Banks usually manage profitability by trying to beat market averages and keep profits steady and predictable; which in turn attracts investors. Ratios are therefore extremely useful tools, but as with other analytical methods, they must be used with judgment and caution, since they alone do not provide complete answers about the bottom line performance of banks. In the short run, many tricks can be used to make bank ratios look good in relation to industry standards. An assessment of the operations and management of a bank should therefore be performed to provide a check on profitability ratios.

Ratios are a basic tool for financial analysts and are essential to examine the effectiveness of a bank's risk management process. They are normally the initial points that provide clues for further analysis. Changes in ratios over time offer a dynamic view of bank performance. Graphs are powerful tools for analyzing trends and structures. They facilitate comparison of performance and structures over time, and show trend lines and changes in significant aspects of bank operations and performance.

The structure of the Estonian banking sector has changed fundamentally during the last years. Today, the banking system is highly concentrated and two Swedish-owned banks dominate in the market (see also table of this paper). The consolidation process continued throughout the second banking crisis in 1998-1999 resulting in fundamental bank reorganizations. We can notice all three worldwide trends in the financial consolidation process also in the Estonian market: domestic consolidation, foreign entry and cross-border consolidation, and the formation of financial conglomerates and bank assurances.

In this research, authors outline how can influence of strong participation of strategic investor from matured economy be related to the efficiency of commercial banks in Estonia in first period (before 1999) and later, when all key players were connected to some Scandinavian commercial bank. Change of efficiency is analyzed through comparison of key measures

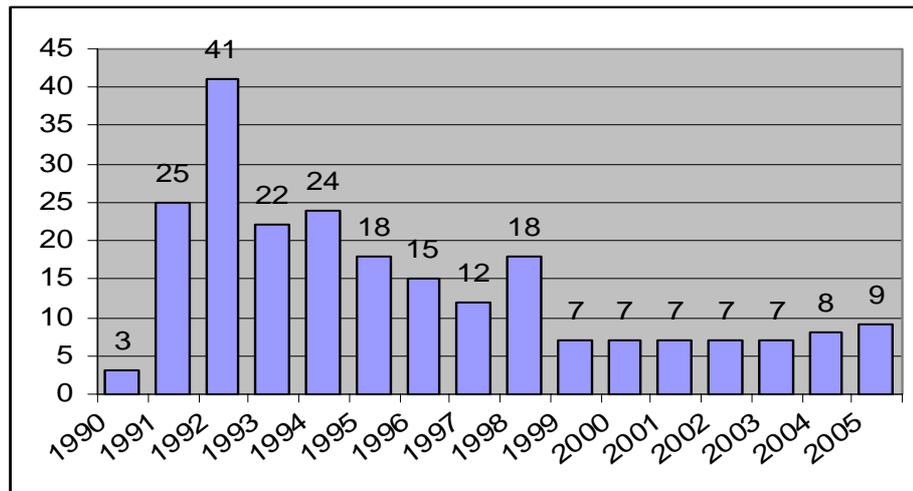
before and after involvement of strategic investor, in relation with changed regulative environment of Estonia.

2. Banking in Estonia

Banking in Estonia has teenager phase (the period is 15 years). Initially Estonia has selected and introduced in life a model of a universal banking that allows banks to participate in other financial activities including operating leasing, insurance, and brokerage firms. The history of the Estonian banking was rooted in 1990s (after acquiring the independence). In most central and eastern European countries (CEECs) and the Baltics, the monobank structure was abolished in the late 1980s. CIS countries introduced a more competitive system in the early 1990s. With the elimination of monobank systems, most countries experienced a rapid expansion of the banking sector with the entry of a large number of new banks and corresponding declines in state ownership in the sector. Foreign banks entered the field in many CEECs and the Baltics in the second half of the 1990s.

At that time, the commercial banks were either new entities established by domestic industry or privatized branches of the former Soviet banks. The stages of development of banking system a little differ from other transition economies. The liberalization and decentralization of the economy accompanied by lax monetary and fiscal policies contributed to overly fast growth in both the volume of credit and the number of banks. Given extremely low barriers to entry the number of banks increased dramatically in the beginning of 1990's. New banks appeared one by one (there were 42 banks), who's careless activity led to the events that shocked all banking system (the moratoriums were declared to many banks) (see figure 1).

Figure 1. Number of banks in Estonia



Source: Bank of Estonia

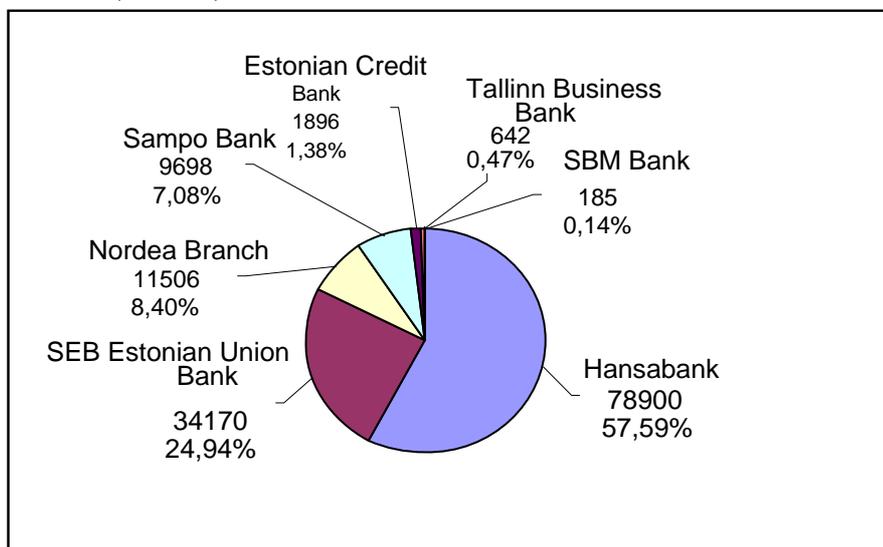
Rapid increases in stocks of non-performing loans led to banking crises in many transition countries during the 1990s. In fact, transition made banking sectors vulnerable in several respects. Many crises arose out of insolvencies in state-owned or formerly state-owned banks caused by bad loans inherited from the Soviet era. Moreover, transition cut enterprise profitability in certain sectors, reduced the ability of companies to service their loans. Estonia has experienced two serious banking crises during the about 15-year period of its banking sector development and restructuring, the first crisis in 1992-1994 and the second in 1998-1999 (Sõrg, M. and Vensel, V.). As a result, problems of banks and the insolvency of eight smaller banks seriously undermined the overall credibility of the Estonian banking sector. The operating environment for banks deteriorated in conjunction with severe output contractions in the early part of transition. Finally, regulatory frameworks and supervisory structures for the banking system in most transition countries were inadequate (EBRD 1998, Tang et al. 2000).

These events in Estonia lead to foreign investment. Countries that have undergone financial crises are often looking to stabilize their banks with the help of international investors, often by allowing multinational banks operations to quickly expand their operations. Foreign investment came primarily from Finland and Sweden, countries with long historical and cultural ties to Estonia. In time the banking system gradually improved, the process of licensing and banks mergers led to a few banks for the moment.

Generally speaking, the events of the late 1990 had a positive effect on banking in Estonia. Banks started to pay more attention to risk analysis and diversification spread; a shift from speculative to cautious action took place. This resulted in the extremely cautious domestic credit policy practiced by the banks and the growth of their foreign assets. Banks' customers who had also learned a lesson from the banking crisis, when choosing a bank did it with greater care now. The keen competition between the banks forced them to be more attentive to their client's needs, which, in turn, fostered the restoration of the trust in the banking system. The 1998 became the year of so-called *second-wave* restructuring in the banking sector. Increased competition resulted in several major mergers as well as the exit of weaker and inefficient institutions from the market.

Today, the banking sector has consolidated and there are mainly Scandinavian banks as strategic investors in Estonian commercial banks. The Estonian banking system is dominated by two foreign controlled banking groups: Hansabank and Union Bank (see figure 2). Together the two banks control around 85 per cent of the Estonian banking sector. In all, six licensed credit institutions and three branches of credit institutions licensed in a EU Member state were operating on the Estonian banking market on 1 October 2005; 63 foreign credit institutions had submitted applications for providing cross-border banking services and five credit institutions had a representative office in Estonia.

Figure 2. The Balance sheet and market share by commercial banks in Estonia (mln.kr), 31.12.2004



Source: Estonian Banking Association

Estonia is a small country. Through foreign investments it was able to create a sound banking sector. The ownership structure of Estonian banks is presented in Table 1. Together banks with foreign capital control around 97 per cent of the Estonian banking sector. In addition to capital, the foreign banks brought their credibility. The share of large Swedish banks in the Estonian banking market guarantees confidence in the financial sector here. It is interesting that the owner of Hansabank – Swedbank is a leader in Estonia and the fourth big bank in Sweden. SEB is the second in Estonia and at home. However, Nordea is the largest financial enterprise in the Nordic region, but has the third place in Estonia.

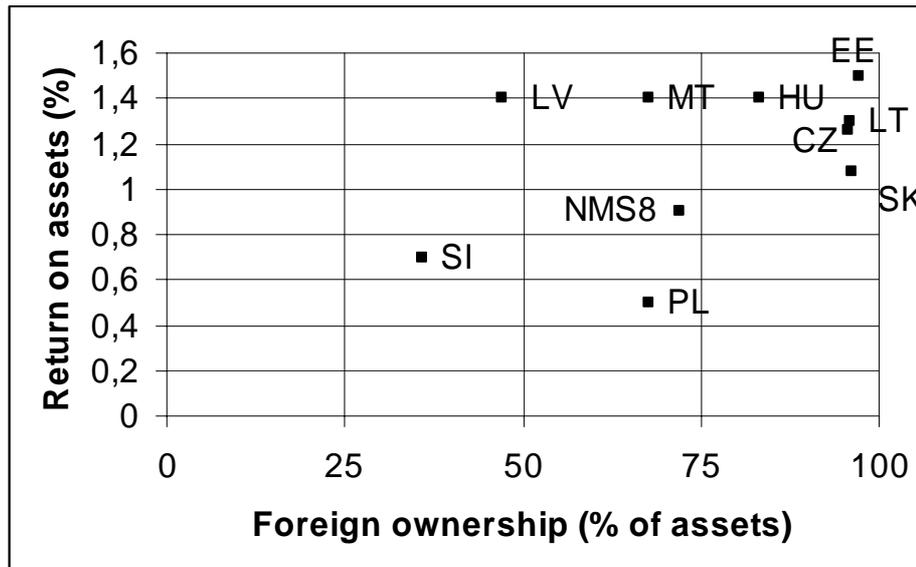
Table 1. Estonian commercial banks and their owners, 2005

<i>Group</i>	<i>Large banks</i>	<i>Medium-sized banks</i>	<i>Small banks</i>
<i>Banks</i>	Hansabank (Swedish Swedbank)	Sampo Bank (Finland's leading bank)	Tallinn Business Bank (Estonian residents)
	SEB Estonian Union Bank (Swedish Skandinaviska Enskilda Banken)	Nordea Bank Finland PLC Estonian branch	Estonian Credit Bank (Russian owner)
			SBM Bank (from the end of 2004 Greek and Swedish owners)
			Parex Bank (from the end of 2004) (Latvia owners)
		HVB~Bank (German HypoVereinsbank AG).	

Source: Bank of Estonia

Foreign presence is very large in most New Member States. On average, more than 70% of bank assets are foreign-owned. Foreign presence is notably high in Estonia. Correlation between foreign ownership and ROA in New Member States is 0,78 (ECB 2005).

Figure 3. Foreign ownership and banking sector performance in 2003



Source: European Central Bank, 2005

However, most empirical evidence seems to point toward a positive association between foreign ownership and banking sector performance in transition countries. This is also borne out by the evidence in Figure 3 for the banking sectors of the NMSs. The chart suggests a positive relation between foreign ownership and ROA for the year 2003. It should be acknowledged, however, that banks' performance may vary substantially within the different NMSs, depending not only on ownership, but also on the specialisation and strategy of the individual banks. Foreign presence is very large in most NMSs, mainly in the form of subsidiaries of foreign banks. On average, 72% of bank assets are foreign-owned. In general, NMS banks have a limited presence abroad which more often occurs via branches in neighbouring regions, but some banks also have equity participations in foreign banks. The market structure of NMS banking sectors is generally characterised by relatively high concentration. On average, the largest five banks hold 72% of total banking sector assets in the NMSs. Given the high concentration in most of the NMSs, potential concerns may arise as regards the degree of competition (16).

Foreign ownership is beneficial for the banking systems of (former) transition countries since it involves a transfer of technology and human capital which increases the operational capacity of local banks. In particular, foreign ownership is widely believed to have contributed to an improvement of the risk profile, reputation and risk management of local banks and hence to financial stability in NMSs and a convergence with western standards.

As most new Member States followed similar development paths during the transition period, most NMS banking sectors share common structural characteristics. Despite an upward trend in many countries, the level of financial intermediation is still low in the former transition NMSs, compared with the EU-15 countries. In terms of financial structure, the NMSs rely more heavily on bank finance than on direct market finance, as is the case in most EU-15 countries. The structure of the banking systems is dominated by commercial banks, with an around 90% share of total banking sector assets. In some countries there are also a significant number of small cooperative banks.

3. Evaluating Banks' Performance in Estonia

Banks performance monitoring, analysis and control need special analysis of their operating and activities results from the viewpoint of different audiences, like investors (owners), regulators, customers (clients), and management themselves.

Foreign banks entry into transition economies is very topical and widely discussed subject in the recent literature, because the banking sector has a strong effect on whole economy. As stated above, the Baltic banking has changed dramatically since the new economic and legal framework was introduced in the early 1990s. Estonian has very liberal economic policy and the share of the foreign capital in Estonian banking is 97%. At the same time, the Estonian banking market is highly concentrated and all largest are controlled by foreign capital. They say that „Swedish use of Estonian banking system“. Consolidation was followed by an inflow of foreign capital from Scandinavia.

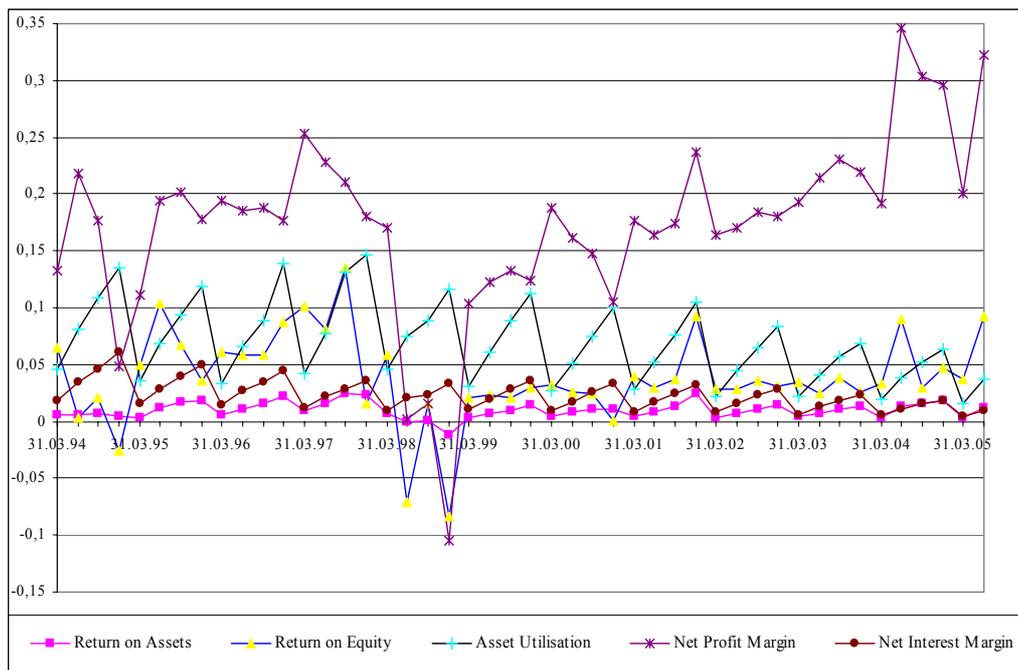
Compared to previous years, the growth rate of nominal indicators in the banking sector slowed down during 1998-2000, partly due to the changes in the external environment. With the deterioration of the economic environment in 1998, wrong economic and management decisions that had been made already surfaced in 1998 and resulted in the dropout of three banks from the banking market in July-October.

In this paper we present one of the possible approaches to such financial analysis. The following chart presents visually financial ratios of Estonian banks consolidated balance sheet and income statement. We investigate a number of indicators: the return on assets, the return on equity, the leverage, and the net results of the banks. The ratios are discussed below.

The following figure 4 presents visually financial ratios of Estonian banks consolidated balance sheet and income statement. The ratios are discussed below.

Profitability is an indicator of a bank's capacity to carry risk and/ or to increase its capital. Supervisors should welcome profitable banks as contributors to stability of the banking system. Profitability ratios should be seen in context, and the cost of free capital should be deducted prior to drawing assumptions of profitability.

Figure 4. Financial ratios of Estonian commercial banks, 31.03.1994 - 31.03.2005



Source: Bank of Estonia (authors calculations)

The consolidation of the banking sector and changes of the ownership structure resulted in a significant strengthening of banks' capital base and liquidity. The capitalization increased over 16% of weighted assets and it has continued to be at the same level. In addition, risk management and corporate governance practices were reviewed. All these developments led to the renewed increase of profitability in the banking sector in 1999. Additionally, the substantial deepening of financial intermediation has taken place, the balance sheet of commercial banks almost doubled during last three years. End of third quarter 1999, total assets of the banking sector were nearly 3 billion euros, which is 61% of GDP. The developments in the banking sector

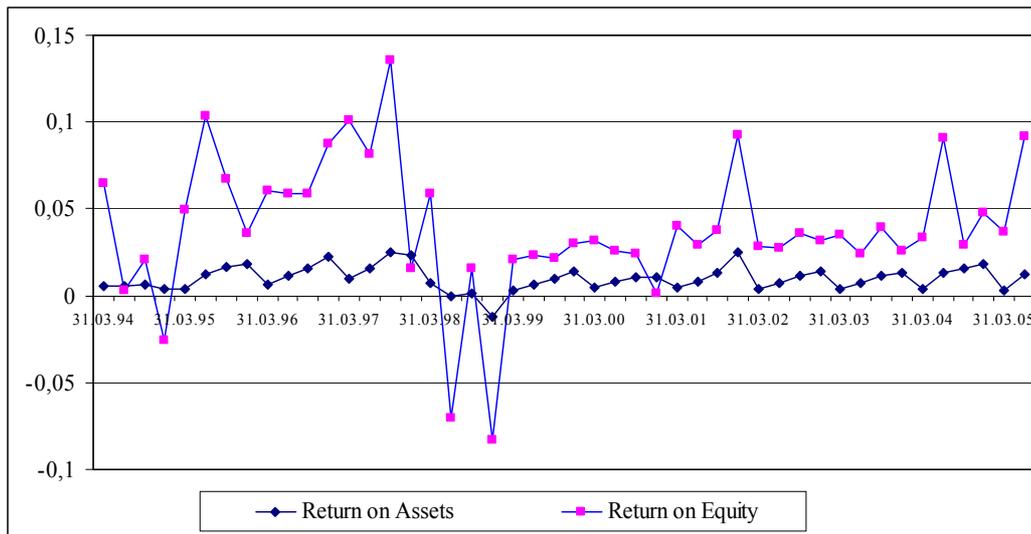
have been rapid, indeed, and the increased stability, integration and efficiency are important factors for sector's further progress.

Return of total assets (ROA) is one of the most frequently used by financial analysts. ROA measures the ability of bank management to generate income after all financial and non-financial costs and expenses for owners. Changes in ROA are usually the cause of most important changes in banks' performance and need a more detailed analysis.

Estonian domestic banks had a particular bad year in 1998 and 1999 when their combined ROA was -2, 4%. Naaborg and other authors examined to what extent foreign banks are more efficient and profitable in transition countries. Their general conclusion can be that both for domestic and the foreign banks there is an upward trend in ROA, while domestic banks were more sensitive to the economic and financial crisis in 1998 than foreign banks (Naaborg 2004).

As total assets present the volume of total resources available to the bank, ROA can be interpreted as an overall measure of banks' performance.

Figure 5. Return on Assets (ROA) and on Equity (ROE) Estonian commercial banks, 31.03.1994 - 31.03.2005



Source: Bank of Estonia

The book rate of return on equity is the most widely used and popular descriptor of the banks' performance, results from the viewpoint of owners (investors).

Both ROE and ROA are having significantly changing levels during the period under consideration. Highest consolidated returns were in 3rd quarter of 1997 (28, 8%) when lowest were in the end of 1998 (-7,5%). This

period was really difficult for all banks in Estonia, what can be seen also from the figure, as the total banking sector had losses.

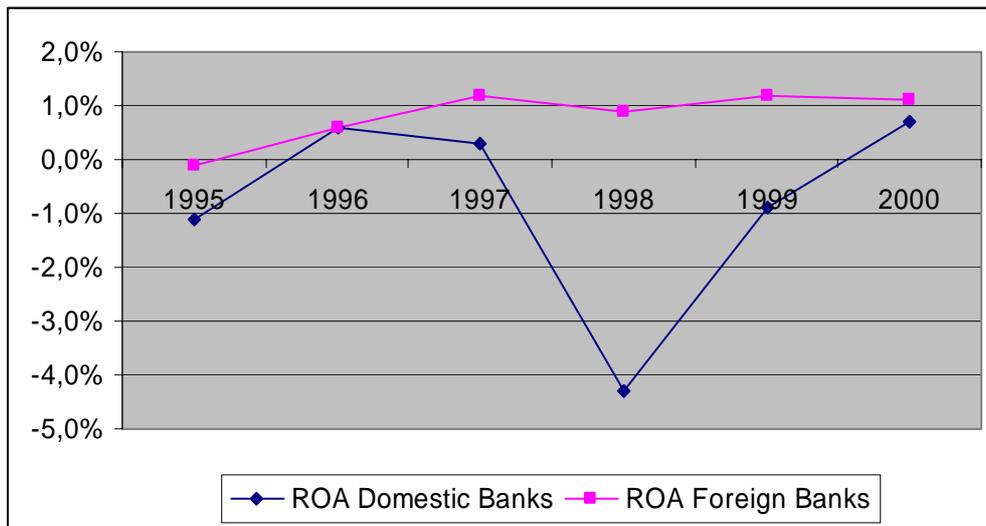
Returns are fluctuating in periods of approximately a year, although it is not exact. Large fluctuations are caused partially by the low equity requirement; also some insufficient control by Estonian Financial Authorities may be one of the reasons.

According to Claessens et al. (2001), foreign banks are more profitable and efficient than domestic banks in developing countries, while in developed countries domestic banks are more profitable and efficient than foreign banks. These differences can reflect a differential impact of informational (dis)advantages, customer bases, bank procedures as well as different relevant regulatory and tax regimes.

There are only few studies on the profitability and efficiency of the banking sector in the transition economies. Green et al. (2002) estimate the efficiency of domestic and foreign banks in Central and Eastern Europe, in terms of economies of scale and scope. They find that foreign banks are not really different from domestic banks and that bank ownership (foreign versus domestic) is not an important factor in reducing bank costs.

Naaborg (2004) examines to what extent foreign banks are more efficient and profitable in transition countries, they investigate a number of indicators at the aggregate level for both foreign and domestic banks. The first indicator reflects banks' profitability is the return on assets (ROA). Figure 6 gives the average ROA for foreign and domestic banks. It appears that the average ROA of foreign banks is higher than the average ROA of the domestic banks.

Figure 6. Return on assets of banks in CEE countries: foreign vs. domestic banks, 1995-2000

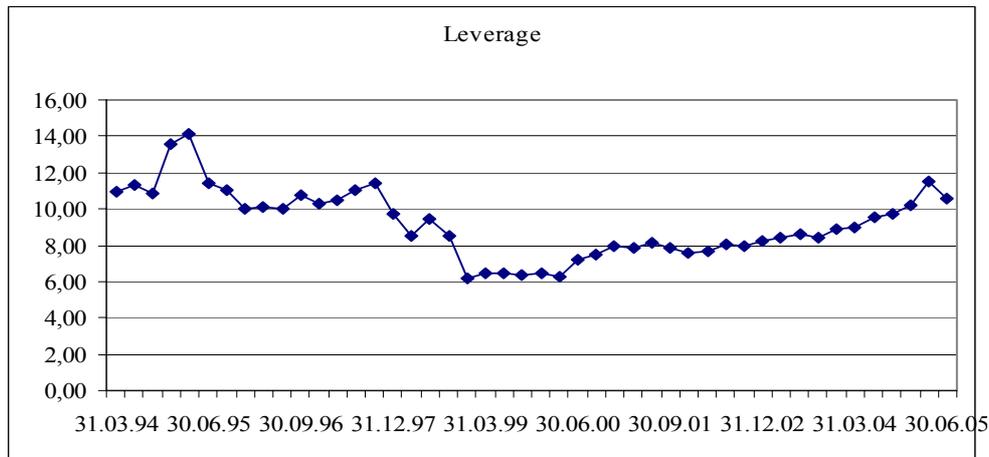


Source: Naaborg 2004

The picture is severely affected by bad results for domestic banks in 1998 and 1999. In all other years, the ROA of domestic banks did not diverge much from that of foreign banks. Figure 6 shows that the ROA of domestic banks tends to converge to the average ROA level of foreign banks. The general conclusion can be that both for domestic and for foreign banks there is an upward trend in ROA, while domestic banks were more sensitive to the economic and financial crisis in 1998 (moratorium from the Russian debt crisis) than foreign banks.

Financial leverage ratio measures how many kroons of assets the bank has per one kroon of equity and may be interpreted as a descriptor of the banks' gearing. On the Figure 7 leverage is presented.

Figure 7. Financial leverage ratio of Estonian commercial banks, 31.03.1994 - 31.06.2005

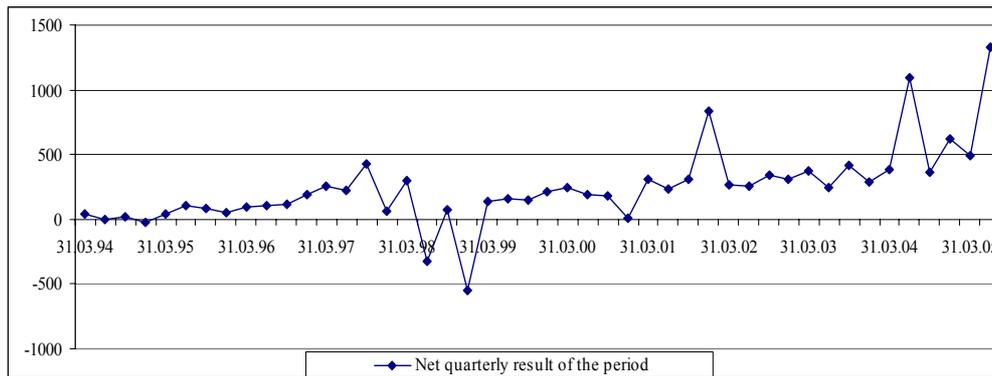


Source: Bank of Estonia (author's calculations)

Two different periods can be seen on the figure: the first one in periods 1994 to 1998 and the second from 1999 until today. The first period can be characterised as a period of significant fluctuations of leverage on higher level. The second presents more stable and balanced development stage. This first period was partially caused by small equity requirement, which enabled banks to achieve high leverage and, at the same time to take higher risks, what caused large fluctuations. Banks leverage ratio decreased substantially due to a Central Banks new equity requirements which forced banks to raise equity or to merge. Growth started again in 2000 and has stabilised after 2001.

Until 1997 the Estonian banking sector was characterised by a rapid nominal growth of total assets and loan portfolios. 1997 was the beginning of a new stage in the development of the Estonian financial sector, especially in the international context, which is confirmed by investment grade credit ratings assigned to Estonia. The rapidly growing economy boosted credit demand and also non-banking financial intermediation accelerated.

Figure 8. The net quarterly result of the banks Estonian commercial banks, 31.03.1994 - 31.03.2005



Source: Bank of Estonia

The net result of the banks is fluctuating on a yearly basis, caused by accumulation of the profit during the year.

The main factor of change in returns is the change of profit margin. If the difference between lowest and highest level of ROE is more than 3 times, the same difference in profit margin is more than 4 times. At the same time assets utilisation decreased approximately 10%. This is indicating to the improved cost control in Estonian banks as well as to the overall increase of banks efficiency. Decrease of the leverage influenced negatively ROE of banks in the period 1997 to 1998, but it decreased risks in banking sector causing the total number of banks to decrease.

Largest jumps in quarterly profits are in 1997 – 1998, when the backwash of instability of financial markets and collapse of sales to Russian market of main customers of Estonian banks caused profits to be either high or very low. In two quarters total result of Estonian banks was negative, the achievement what has been repeated any more.

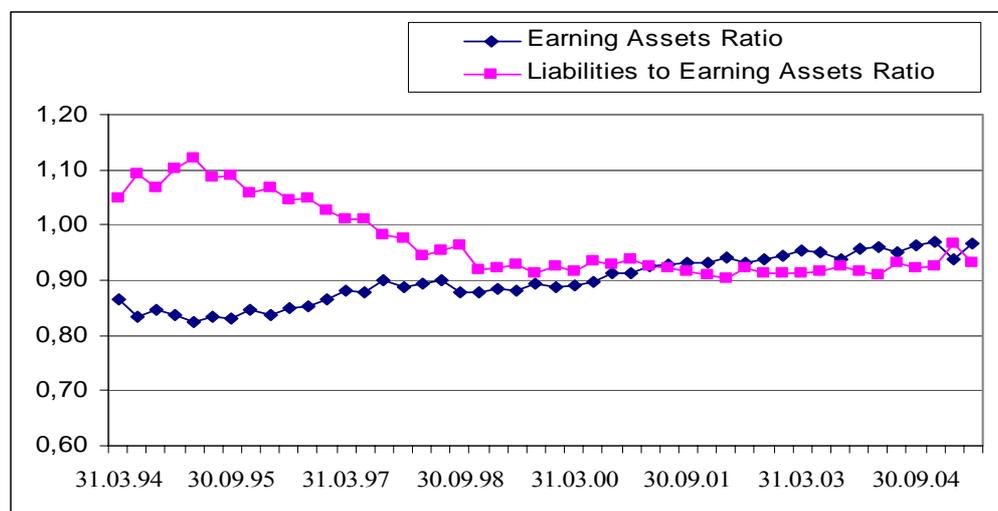
After that the banking sector has been stabilised, partly due to interference of Estonian Banking Authorities, partly due to obtaining of control by Scandinavian banks over Estonian major banks (Estonian Savings Bank, Hansapank, Estonian Union Bank, Optiva Bank).

The ratios, used for the graphs above are presented at the appendix 1.

Strong and stable net interest margins have traditionally been the primary objective of bank managers, and are still the primary determinant of intermediation efficiency and earning performance. An analysis of the interest margin of a bank can highlight the effect of current interest rate patterns, while a trend analysis over a longer period of time can show the effect of monetary policy on the profitability of the banking system. It can

also illustrate the extent to which banks are exposed to changes in interest rates, and thus the ability of management to effectively manage interest rate risk.

Figure 9. Earning Assets Ratio and Liabilities to Earning Assets Ratio in Estonia



Source: Bank of Estonia (authors calculations)

As you can see on the figure 9, there is the stable period after consolidation with foreign banks. Before the second crises in 1998-1999 there was a great difference between two ratios, after foreign banks entrance this difference almost disappeared.

The banking market concentration, being the share of three largest banks assets in total banks' assets, achieved more than 90% already in 1998. Foreign banks share in total assets of Estonian commercial banks increased dramatically and was 97, 4% at the end of 2000. The Estonian financial sector is clearly bank-oriented – the bank assets to GDP ratio was 68,2% and the banks assets share in total financial assets was more than 60% in the last years. Private credits by banks and other financial institutions increased considerably during the analysed period – a private credit by banks to GDP ratio was 38,7% and overall private credits to GDP ratio 49,7% in 2000.

At different times internationalisation has had various goals and forms. Besides the macroeconomic factors that rule the internationalisation of banks the ambitions of bank managers also play an important role. In the bankers viewpoint the motives of internationalisation can be divided into four groups (Rugmah and Kamath, 1987):

- Use the potential ability of a bank more entirely, for example, the domestic management and sales skills may enable banks to offer services abroad at lower costs. It also enables local companies, subsidiaries abroad to use competent information about the possibilities and conditions in the mother country.
- Use the reputation of the parent bank. The subsidiaries set up abroad may get competitive advantages as, by a rule, an international bank is considered more reliable than the local banks.
- Reduce banking regulations. In many cases the main purpose of setting up subsidiaries and branches abroad is to overcome the restrictions on moving capital abroad.
- Reduce risks. As economic situation, legislation political situation and other circumstances may change, being present will enable to recognise the risks in time and take necessary countermeasures.

There are several positive effects of foreign banks' entry into Estonia. Foreign banks entry has improved service innovation in Estonian banking. The largest Estonian banks are Hansabank and Union Bank, which both have a large share of foreign capital, have well-developed Internet banking services. A very positive spill-over from foreign banks is modern bank risk management. Foreign banks have made Estonian banks more trustable and lending from international markets has become less expensive for banks and also for banks' customers.

The Estonian banking market was quite competitive in the end of 1997, but today, after several mergers and bankruptcies, the Estonian banking market is excessively concentrated by international standards.

4. Conclusions

As there is tight connection between banking sector success and overall growth in GDP, it is difficult to say whether improved efficiency of Estonian banks was caused by stabilised macroeconomic environment or entry of foreign financial institutions has improved Estonian banks systems in the way that they were able to stabilise the whole economy.

It is clear that better risk management has stabilised returns of Estonian banks. As the banking sector was highly aggressive in periods 1994 to 1998, the returns fluctuated in large scale. After 1998 returns have stabilised.

After banking crises of 1998, Estonian banks have matured and they hardly can be named as transition economy's banks; style, performance and abilities are more close to Scandinavian tradition than to transition economy's habitants.

Estonian commercial banks have passed the same internationalisation stages as the banks of developed countries: first, establishing correspondent relations with the banks of other countries, then entering the international and capital markets, and finally, building up controlled units within the boundaries of other national banking systems.

Estonian banking sector is also opened to the invasion of foreign banks. The internationalization experience of the Estonian banks shows that the process is inevitable and useful at the same time for such a small country as Estonia.

The challenges for the banks after foreign investors' entry will be summarized in the form of following statements:

1. All three worldwide trends in the financial consolidation process also in the Estonian market: domestic consolidation, foreign entry and cross-border consolidation, and the formation of financial conglomerates and bank assurances;
2. An improvement of the risk profile, reputation and risk management of local banks and hence to financial stability in NMSs and a convergence with western standards;
3. Foreign banks entry has improved service innovation in Estonian banking;
4. The stable period in ratios after the second banking crisis 1998-1999 and consolidation with foreign banks;
5. An upward trend in ROA, while domestic banks were more sensitive to the economic and financial crisis in 1998 than foreign banks;
6. Foreign presence in banking is notably high in Estonia. On average, more than 70% of bank assets are foreign-owned in New Member States. Banks with foreign capital control around 97 per cent of the Estonian banking sector;
7. Correlation between foreign ownership and ROA in New Member States is 0,78 (ECB 2005). There is quite strong relationship between foreign ownership and return on assets. ROA is greater in Estonia than in other states.

References

- [1] Bank of Estonia. *Banking Sector consolidation 1994-2004*. Access: http://www.eestipank.info/pub/et/majandus/finantskeskkond/lopetanud_pangad/
- [2] Bank of Estonia. *Statistical Indicators*. Access: <http://www.eestipank.info/pub/en/dokumendid/statistika/>
- [3] *Banking Structures in the New EU Member States*. European Central Bank, (2005)
- [4] BERGLOF, E., BOLTON, P. *The Great Divide and Beyond: Financial Architecture in Transition*, Vol. 16, No. 1, Winter 2002, pp. 77-100.
- [5] BLOMMESTEIN, H.J. *Institutional Investors, Pension Reform and Emerging Securities Markets*, Chapter 10”, 1998.
- [6] BONIN, J.P., LEVEN, B. *Polish Bank Consolidation and Foreign Competition*.
- [7] CLAESSENS, S., A. DEMIRGUC-KUNT, H. HUIZINGA, (2001) “How does Foreign Entry Affect Domestic Banking Markets?”, *Journal of Banking and Finance*, 25 (5), 2001, pp.891-991.
- [8] *Estonian banking industry in 1988-1998*, Access: <http://www.pangaliit.ee/history.html>
- [9] *Financial institutions operating in Estonia*. Access: http://www.eestipank.info/pub/et/majandus/finantskeskkond/kommerts_pangad/
- [10] EBRD, “*Transition Report 1998*”, Oxford: Oxford University Press, 1998.
- [11] GREEN, C., MURINDE, V., NIKOLOV, I. *The Efficiency of Foreign and Domestic Banks in Central and Eastern Europe: Evidence on Economies of Scale and Scope*, 2002.
- [12] GRUENING, H. VAN. *Analyzing Banking Risk: A Framework for Assessing Corporate Governance and Financial Risk Management*. Herndon, VA, USA: World Bank Publications, 1999. p 83. Access: <http://site.ebrary.com/lib/ttul/Doc?id=10070392&ppg=100>
- [13] HANSSON, A. *Reforming the banking system in Estonia*, 1994. http://muhu.www.ee/By_Subject/Economy/Hansson_Banking.txt
- [14] KUTAN A.M., PAUTOLA-MOL, N. *Integration of the Baltic States into the EU and Institutions of Fiscal Convergence*. Bank of Finland, Institute for Economies in Transition BOFIT Discussion Papers 9/2002
- [15] NAABORG I., B. SCHOLTENS, J. DE HAAN, H. BOL, R. DE HAAS *How Important Foreign Banks in the Financial Development of European Transition Countries?* *Journal of Emerging Market Finance*, 2004. Access:

- http://www.cesifo.de/pls/guestci/download/CESifo+Working+Papers+2003/CESifo+Working+Papers+December+2003/cesifo1_wp1100.pdf
- [16] PRONSATI, M.P. Great expectations, *Community Banker*, 2000, Vol.9 Issue 4, p.16.
- [17] SÖRG, M., VENSEL, V., *Development of the Banking System under the Estonian Currency Board*, Working Papers in Economics of the Faculty of Economics and Business Administration at Tallinn Technical University, 2001, pp.51-59.
- [18] TANG, H., ZOLI, E., KLYTCHNIKOVA, I. *Banking crises in transition countries: Fiscal costs and related issues*. World Bank Policy Research Working Paper 2484, 2000.

THE PERSISTENCE OF PROFITS IN THE TURKISH BANKING INDUSTRY

Eralp Bektas

Department of Banking and Finance
Eastern Mediterranean University
Gazi Magusa, North Cyprus,
Mersin 10
Turkey
E-mail:eralp.bektas@emu.edu.tr

Abstract

This study uses IPS test methodology to test for unit roots for the panel data and analyze the profit persistency in the Turkish Banking Industry. For this purpose, banks profit rates (ROA) employed in this study. As it is expected, results of the study indicate that, banks operating in Turkey have different speed of adjustment and long run profit persistency. Peer group analysis, has also shown that, they share different profit persistency. Hence, findings reveal that, banks have diverse market behaviour in the Turkish Banking Industry, which increases competition in the banking industry.

Keywords: *profit persistence, banking sector, IPS test, Turkey*

1. Introduction

The role of banking industry in efficient fund transfer is more important for developing countries than developed countries. The need for efficient allocation of resources is the result of growth motives of the countries. Hence, to reach this task, it needs efficiently operating financial system and institutions. Since, financial markets especially capital markets and related financial institutions are not developed such a level that can eliminate asymmetric information and related problems, the role of banks in these countries gain more importance.

Efficiently functioning banking system provides better and low cost services to creditors and borrowers. Hence, facilitates transfer of funds in the economy. Among others, one of the most important prerequisites of efficiency is the competition. As competition increases in the market, firms try to allocate their productive resources as efficiently as possible. The aim of this effort is to strengthen their competitiveness in the industry. By this way, they can protect their ex post profit level and set up new entry barriers in the industry. Their successes in creating barriers will be proportional to profit level and hence, persistency of profits in the industry.

Since the banking industry is among the most regulated industries, we can assume that entry barriers have already existed. Therefore, we can expect higher profit persistency. Nevertheless, profit persistency is not only determined by regulatory environment. Sensitivity to micro and macroeconomic policies plays crucial role in competition and persistency of profits in the banking industry¹. Therefore, to consider determinants of profits in a simple equation, like in other persistency studies, a reduced model of the profit function is used in our study.

This paper analyses profit persistency of a banking system in an emerging market economy, namely the Turkey. It uses time series analysis of twenty eight surviving banks for the years 1989 to 2003. The persistency of profits in the Turkish Banking Industry (TBI) is evaluated by using the net income after tax to total assets (ROA) as a profit measure. Study applies well established profit persistency methodology that has been using very widely to measure profit persistency in non-financial sectors (Mueller, 1977; Geroski and Jacquemin, 1988; Glen et al., 2001; Maruyama and Odagiri, 2002; Glen et al., 2003; Yurtoglu, 2004). Although we employ same methodology to measure profit persistency and hence, the competitiveness, different from

¹ Berger et al. (2002) find that, in addition to market power in input markets, regional macroeconomic shocks are also important for banks profit persistency in U.S.

previous studies, it is done for an emerging country's banking sector. The panel structure of data leads us to employ IPS test methodology for the unit root test which was developed by Im et al. (2003).

2. Methodology and Data

Similar to previous studies Yurtoglu (2004), Glen et al. (2003), Maruyama and Odagiri (2002), Glen et al. (2001), we also employ the following first order autoregressive equation to estimate the persistency of banks' profits. The critical reason of concentrating on the first order autoregressive equation is the insignificant lagged variables at a higher order which is common in many other studies.

The model of the study is:

$$\pi_{i,t} = \alpha_i + \lambda_i \pi_{i,t-1} + \mu_{i,t} \quad (1)$$

where $\pi_{i,t}$ is derived as follows,

$$\pi_{i,t} = P_{i,t} - \bar{P}_t \quad \text{where} \quad \bar{P}_t = \sum_{i=1}^n P_{i,t} / n \quad (2)$$

In equation 2 \bar{P}_t is the average profit rate of banks operating in the industry for the current year. Due to business cycles or macroeconomic changes, there would be an extensive variation in the profit rates of banks. Hence, these would have negative implications to the econometric analysis. Therefore, banks' profit level is normalized and controlled, by subtracting industry average \bar{P}_t at time t, from the profit rate $P_{i,t}$ of bank i at time t.² Peculiarity of the banking system makes it more sensitive to business cycles, regulatory changes and other economic changes. Hence demeaning of data is becoming more important.

As indicated in persistency studies, for example, Geroski (1990), equation 1 is a reduced form equation, which contains implications of the other important determinants of competition (especially unobservable ones), like potential threat of entry. Therefore, the use of equation 1 in time series estimation eliminates the role of unobservable variables in the determination of competitive forces. Using profit rates as observable data therefore, not

² This normalization process is becoming more important for countries like Turkey, where economy is highly unstable due to political instabilities, balance of payment, budget deficit and inflation.

requiring unobservable data provides advantage to this equation. Nevertheless, its inability in the specification of different determinants of competitive forces can be evaluated as the weakness of the equation.

By regressing $\pi_{i,t-1}$ on $\pi_{i,t}$, the impact of previous years profit rates to the current year profit rates can be estimated. In other words, the value of λ_i predicts the intensity of competition or speed of adjustment towards the mean profit of the industry. Hence, it can be used to measure the persistency of the profits in a particular industry or market. Given the condition of $-1 < \lambda_i < 1$ the long-run profit rate or equilibrium profit rate of a firm, is provided by:

$$\pi_{i,p} = \frac{\alpha}{(1 - \lambda_i)} \quad (3)$$

The lower value of $(1 - \lambda_i)$ implies, transfer of the previous year's profit rate to current year is highly usual. In other words, previous years profits can be carried over to the next year. Therefore, convergence or speed of adjustment process towards the norm of the industry is quite slow. In the industries where competitive forces exist and are functional, the value of λ_i is expected to be at lower values. According to Maruyama and Odagiri (2002) λ_i can be used to evaluate speed of adjustment and stickiness of the short run abnormal profits.

We propose that entry decision is determined by after tax figures. Therefore, in our return on assets (ROA) calculations, we use net income after tax. To consider the time and cross-section dimension of data, we employed panel data of 29 banks ROA from the TBS and have common run of 14 observations for the period 1990-2003. In persistency studies, time dimension of data is one of the prerequisite for the evaluation of the previous year's impact to current years.

3. Results

In time series analysis autoregressive models are commonly used for forecasting future values of an economic variable that contains information on their past values. However, to avoid spurious regression and inference mistakes, the Dickey-Fuller (DF) test or augmented Dickey-Fuller (ADF) test is required to test whether the series are stationary or nonstationary. Therefore, we first start our analysis by testing unit root hypothesis for our banks data, and then we check the serial correlation of our disturbances in equation 1 and finally, we investigate the lag structure of our equation.

The application of ADF test to panel data which has time and cross section dimension is well explained in Im et al. (2003). The test simply based on the average value of the augmented DF statistics. If there is no serial correlation, panel unit root test can also be done by using the DF test. In this study, the test will be based on the average value of the DF statistics. The standard DF statistic for each group is given by the t-ratio of β_i in the DF version of equation 1 which is given by:

$$\Delta\pi_{i,t} = \alpha_i + \beta_i \pi_{i,t-1} + \varepsilon_{i,t} \quad (4)$$

where $\beta_i = \lambda_i - 1$ and $\Delta\pi_{i,t} = \pi_{i,t} - \pi_{i,t-1}$. An alternative hypothesis formulated as above equation, allows for β_i differing across groups and also allows for some of the individual series to have unit roots. Using the equation 4, we begin by estimating DF t-statistics for each bank. Then, we calculate the average value of the t-statistics from equation 4. The result is equal to -2.25 for the sample of 28 banks observed over the 1989-2003 period. Since the calculated t-statistics is lower than the critical value of the standardized t-bar test at the 1% level (-1.97), the null hypothesis of nonstationary ROA is rejected³. After the rejection of unit root, serial correlation of disturbances are analysed through Breusch-Godfrey LM test and Ljung-Box Q-statistic. In the light of these statistics, autocorrelation of disturbances in the first, second and third order is not observed in equation 1. Finally, to decide on the lag structure of equation 1, we use general-to-specific procedure and employ Akaike Information Criterion, Schwarz Bayesian Criterion and assessed the t-values of lagged coefficients and adjusted R^2 of estimated equation (Erlat and Ozdemir, 2003; Enders, 1995). Most of the equations favoured to equation 1 as a more appropriate way of estimating persistency of profits in the Turkish Banking System.

Table 1. Regression results, speed of adjustment and the estimates of long-run projected profit rate of the industry

	$\hat{\alpha}$	$t(\hat{\alpha})$	$\hat{\lambda}$	$t(\hat{\lambda})$	$1-\hat{\lambda}$	$\hat{\pi}_{ip} = \hat{\alpha} / (1-\hat{\lambda})$	\bar{R}^2
Mean	0.017	0.76	0.44	1.76	0.56	0.03	0.16

Table 1 summarizes regression results of the equation 1. The estimated λ_i changes in between very high value of 0.74 and 0.03 with a mean of 0.44. The mean value of the speed of adjustment ($1-\hat{\lambda}$) that is determined by $\hat{\lambda}$ is 0.56 and significantly different from zero for about 53% of the sample. This shows that the convergence towards the norm is above

³ Nonstationarity of the private and foreign banks are also rejected, however we could not reject it for state banks.

the average. Four of the banks in our sample have negative long run projected profit rate.⁴ Nevertheless, 14 of them earn positive long run profit rate above the mean $\hat{\pi}_{ip}$, which is 0.03. Adjusted R^2 explains more than 10% variation in the relative profit rates in 17 cases (61%) out of 28. Results of the study show that competition among the surviving banks is moderately high in the Turkish Banking Industry.⁵

Although general results are above, more specific results in terms of ownership provide could provide more insight to our analysis. Therefore, we extend our analysis by classifying banks operating in Turkey in terms of ownership. Then, we have three different classes such as, public banks, private banks and foreign banks.

In the following paragraph we evaluate the private banks profit persistency. For the evaluation purpose, we are going to use table 2 results. As can be seen estimated λ_i (0.43) is almost same with the industry average of 0.44. Nevertheless, smaller value of $\hat{\alpha}$ (0.1) has shown its impact to long run persistency where $\hat{\alpha}$ and $\hat{\lambda}$ used together. The speed of adjustment process is also higher (0.57) than the industry average. Hence, private banks have lower long run profits persistency (0.02) than the industry average. This indicates that private banks are more competitive than the industry.

Table 2. Regression results, speed of adjustment and the estimates of long-run projected profit rate of the private banks.

	$\hat{\alpha}$	$t(\hat{\alpha})$	$\hat{\lambda}$	$t(\hat{\lambda})$	$1-\hat{\lambda}$	$\hat{\pi}_{ip}=\hat{\alpha}/(1-\hat{\lambda})$	\bar{R}^2
Mean	0.01	0.68	0.43	1.73	0.57	0.02	0.15

Foreign banks can have competitive advantages of having better access to foreign markets, technology and skilled bankers. However, factors like, customer relationship, information asymmetries and economic character of domestic country may have negative influences on their operations. Under such an environment we expect lower profit persistency for foreign banks operating in Turkey.

Table 3. Regression results, speed of adjustment and the estimates of long-run projected profit rate of the foreign banks.

	$\hat{\alpha}$	$t(\hat{\alpha})$	$\hat{\lambda}$	$t(\hat{\lambda})$	$1-\hat{\lambda}$	$\hat{\pi}_{ip}=\hat{\alpha}/(1-\hat{\lambda})$	\bar{R}^2
Mean	0.03	1.09	0.39	1.47	0.61	0.04	0.12

⁴ For the US BHCs Roland (1997) find that, there are more BHCs persistently generating negative abnormal profits than BHCs generating positive abnormal profits

⁵ Okumus (2002), profitability study also supports our findings.

Since $\hat{\lambda}$ can be used to predict intensity of competition and speed of adjustment, results at above show that, competition in TBS is higher for foreign banks. In other words, they could not carry their previous year's profits to current year as their competitors. Although, they have higher speed of adjustment, interestingly their long run profit equilibrium is higher than the private banks. This is because of the constant $\hat{\alpha}$ which represents competitive and permanent return of banks. As it is shown in table 3, this is higher than the industry and private banks average. Nevertheless, $\hat{\alpha}$ and $\hat{\lambda}$ t-value are statistically insignificant, therefore, this result can not be taken into consideration.

In our study, we employ three public banks which are currently operating in TBS. Although we have nonstationary problem with this panel because of data size, we would like to use it to provide some sensible findings. Having different motives than private and foreign banks, as it is expected results are fairly different than the other groups.

Table 4. Regression results, speed of adjustment and the estimates of long-run projected profit rate of the state banks.

	$\hat{\alpha}$	$t(\hat{\alpha})$	$\hat{\lambda}$	$t(\hat{\lambda})$	$1-\hat{\lambda}$	$\hat{\pi}_{ip}=\hat{\alpha}/(1-\hat{\lambda})$	\bar{R}^2
Mean	0	0.23	0.62	2.87	0.38	0	0.35

Due to operational inefficiencies and political interventions to public banks, we do not expect competitive and permanent return for them. This expectation is realized for public banks having zero for constant. Nevertheless, these are the very large banks that own large market share. Relatively high and statistically significant $\hat{\lambda}$ value (0.62) of public banks, which reflects short-run profit actually do not reflect long run profit persistency. This statement is also approved by $\hat{\pi}_{ip}$, which shows long-run or equilibrium profit rate. Nevertheless, this means that they have slower adjustment mechanism than the private and foreign banks. And this could have negative implications to banking industry in general.

4. Conclusion

The aim of the study is to investigate persistency of profits and hence, competition of the banking industry in Turkey. This investigation is done on different peer group basis. To carry out our study, we divide TBI into four groups. First group consist of all banks making the industry. We consider

private banks as or second group, foreign banks as third group and the fourth group represented by the public banks.

In our study, we use IPS test methodology to apply the ADF test for the unit root hypothesis to the panel data. The unit root hypothesis is rejected for our data except for the public banks. The general results for the industry indicates that long run mean profit rate for the industry is very close to zero therefore, in the long run persistency of profits does not exist in the Turkish Banking Industry. Hence, we can say competitive forces in the TBI are at work to eliminate the profits above the norm. Although this result is shared by the private bank's peer group, they are different for foreign and public banks.

References

- [1] BERGER, N.B., BONIME, S.D., COVITZ, D.M., and HANCOCK, D. (2000) Why are bank profits so persistent? The roles of product market competition, informational opacity, and regional/macroeconomic shocks, *Journal of Banking and Finance*, 24, 1203-1235.
- [2] ENDERS, W. (1995) *Applied econometric time series*, John Wiley, New York.
- [3] ERLAT, H. and OZDEMIR, N. (2003) *A panel approach to investigating the persistence in Turkish real exchange rates*, Topics in Middle Eastern and North African Economies, electronic journal, 5, Middle East and Loyola University Chicago. Access: <http://www.luc.edu/publications/academic/>
- [4] GEROSKI, P.A. (1990) *Modelling persistent profitability*, in *The Dynamics of Company Profits: An International Comparison* (Ed.) D.C. Mueller, Cambridge University Press, Cambridge, pp. 15-34.
- [5] GEROSKI, P.A. and JACQUEMIN A. (1988) The persistence of profits: a European comparison, *The Economic Journal*, 98, 375-389.
- [6] GLEN, J., LEE, K. and SINGH, A. (2001) Persistence of profitability and competition in emerging markets, *Economics Letters*, 72, 247-253.
- [7] GLEN, J., LEE, K. and SINGH, A. (2001) Corporate profitability and the dynamics of competition in emerging markets: a time series analysis, *The Economic Journal*, 113, 465-484.
- [8] IM, K.S., PESARAN M.H. and SHIN Y. (2003) Testing for unit roots heterogeneous panels, *Journal of Econometrics*, 115, 53-74.
- [9] MARUYAMA, N. and ODAGIRI, H. (2002) Does the 'persistence of profits' persist?: a study of company profits in Japan, 1964-97, *International Journal of Industrial Organization*, 20, 1513-1533.

- [10] MUELLER, D. (1977) The persistence of profits above the norm, *Economica*, 44, 369-380.
- [11] OKUMUS, H.D. (2002) *Market structure and efficiency as determinants of profitability in the Turkish Banking Industry*.
- [12] ROLAND, K. P. (1997) *Profit persistence in large U.S. bank holding companies: an empirical investigation*, Office of the Comptroller of the Currency Economics working Paper 97-2.
- [13] YURTOGLU, B. (2004) Persistence of firm-level profitability in Turkey, *Applied Economics*, 36, 615-625.

CROSS-BORDER MERGERS AND ACQUISITIONS IN CENTRAL AND EASTERN EUROPE

Tomáš Dudáš

University of Economics in Bratislava
Faculty of International Relations
Department of World Economy
Dolnozemska cesta 1
85235 Bratislava
Slovakia
e-mail: dudas@euba.sk
telephone: +00421 903 423845

Abstract

Cross-border mergers and acquisitions (M&A) are an important aspect of global foreign direct investment flows. Transnational corporations use them to strengthen their market position and to create transnational production networks. The aim of this paper is to describe M&A transactions in central and Eastern Europe after the year 2000. The key findings are that M&A transactions are weak in CEE countries compared to the global M&A activities and that the M&As are dominated by public transactions (privatisation deals). Local IT corporations are a notable exception as many local software developers offer innovative and progressive products.

Keywords: *cross-border mergers and acquisitions, central and eastern Europe, Czech Republic, Slovakia*

1. Introduction

The world economy is a complex economic system and is getting more and more complex every day. Global corporations create production and sales networks, which cross countries and continents. Cross-border mergers and acquisitions (M&A) are an important tool helping to create international corporate networks. The vast majority of cross-border mergers and acquisitions takes place in economically developed countries as these countries are home to the largest and most progressive transnational corporations. On the other hand, available data show that the number and value of cross-border M&As in developing and transition countries fall behind every year.

The aim of this paper is to analyse the role of cross-border mergers and acquisitions in the region of central and Eastern Europe between 2002 and 2004. The main goal is to identify the main trends in the field of cross-border M&As in central and eastern Europe and to show the most active countries not only in sales but in purchases as well. The paper devotes extra space to Slovakia and to the Czech Republic as these are the home countries of the author.

The region of central and eastern Europe for the purpose of this paper consists of 19 countries – Hungary, Czech republic, Poland, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Romania, Bulgaria, Croatia, Albania, Serbia and Montenegro, Macedonia, Bosnia and Herzegovina, Russian federation, Ukraine, Moldavia and Belarus.

The data used for the analysis is taken from the statistical annexes of the most recent UNCTAD World Investment Reports (2004 and 2005). PriceWaterhouseCoopers reports on M&As in central and eastern Europe, Czech republic and Slovakia in 2003 and 2004 are used as an additional data source.

2. Cross-border mergers and acquisitions in the world in 2003 and 2004

The year 2003 witnessed the continuing fall of cross-border M&As as they fell from 370 billion USD in 2002 to 297 billion in 2003 (decline of approximately 20%). to 297 billion USD in 2003 – a decline of 20%. There were only 56 mega deals (of 1 billion USD and over in transaction value) in 2003, a third of the peak number achieved in 2000 (see table 1). The largest

single deal was the acquisition of Household International Inc. (United States) by HSBC Holdings Plc. (United Kingdom) for 15.3 billion USD.

The number of cross-border M&As in 2003 was, with more than 4,500 deals, much lower than the number of greenfield projects. Three of the six countries leading in terms of the number of greenfield projects also led in cross-border M&As. The United States was the largest target country (722 M&A deals), followed by the United Kingdom (459) and Germany (296). In the developing world, China (214) ranked first (4th place in the world), followed by Hong Kong (China) (108), India (83) and Brazil (69). In terms of value, the top nine were all developed countries, followed by the Russian Federation and Hong Kong (China).

An important factor in the decline of FDI, and particularly of M&As, has been a slowdown or end in privatisation. The total sale of State-owned assets fell from about 50 billion USD in 2000 to less than 20 billion USD in 2003. Privatisation-related FDI in developing countries fell to one-tenth the level of 1998, from a record 33 billion USD that year to 3.5 billion USD in 2003. Liquidity and other problems at home lowered TNCs' interests in privatisation. At the same time, some developing countries, particularly in Latin America, became more sceptical of its benefits. Privatisation-related FDI in CEE declined as well¹.

After several years of sluggish performance cross-border M&As grew in the world economy in 2004, when they rose by 28% and reached 381 billion USD. The number of cross-border M&A deals rose slightly (by 12%) and the total number of deals was around 5 100. There was a significant growth of mega M&A deals (value of the deal exceeding 1 billion USD) in 2004, which contributed to the overall growth of M&A transactions. The largest deal in 2004 was the acquisition of Abbey National (United Kingdom) by Santander Central Hispano (Spain) for 15.8 billion USD, almost the same value as that of the largest deal in 2003 but only one-thirteenth of the largest deal ever (the Vodafone-Mannesmann deal in 2000).

¹ Source: UNCTAD World Investment Report 2004

Table 1 Cross-border M&As with values of over \$1 billion, 1996-2004

Year	Number of deals	Percentage of total	Value (billion \$)	Percentage of total
1996	43	0,9	94,0	41,4
1997	67	1,3	129,2	42,2
1998	86	1,5	329,7	62,0
1999	114	1,6	522,0	68,1
2000	175	2,2	866,2	75,7
2001	113	1,9	378,0	63,7
2002	81	1,8	213,9	57,8
2003	56	1,2	141,1	47,5
2004	75	1,5	199,8	52,5

Source: UNCTAD World Investment Report 2005, p. 9

The growth of cross-border M&A transactions was more visible on the local rather on the global level. For example, M&A deals among EU-15 countries rose by 57% in 2004 and their total value reached 99 billion USD. In addition to low interest rates in major economies and rising corporate profits, the recovery of asset prices since 2003 (as reflected in the rise in stock exchange indices) contributed to the rise in M&As. Indeed, partly as a result of increased stock prices, the number of cross-border deals using stock swaps rose from 123 to 161 in 2004 (close to the number of such deals in 1999), accounting for 16% of the total value of cross-border M&As.

The growth in the value and number of cross-border M&As in 2004 was largely due to transactions taking place among developed-country firms: their value rose by 29%. In developing countries – where such transactions are normally less common, as fewer companies attract foreign investors and restrictions continue to be imposed on M&As – cross-border M&As also rose in 2004 by 36% in value, to reach 55 billion USD, two-thirds of the peak reached in 2001. There was a significant rise in cross-border M&A purchases in China and India, with a doubling of value in both countries, to record highs of 6.8 billion USD and 1.8 billion USD respectively. For the first time, China became the largest target country for cross-border M&As in developing countries².

² Source: UNCTAD World Investment Report 2005

3. Cross-border mergers and acquisitions in central and Eastern Europe in 2002-2004

Central and eastern Europe (CEE) emerged as a favourite spot for FDI in the recent years. Many companies (notably in the automotive industry and in electronics) decided to use the comparative advantages of the region and established there their factories in order to service the European markets. New production capacities in CEE are usually developed by greenfield projects, as suitable factories do not exist or they lack new technologies. Currently available data (collected by UNCTAD) confirm the mentioned fact, greenfield projects are getting to dominate the FDI inflows in CEE countries.

Cross-border M&A transactions can usually be divided into private transactions (a foreign private corporation buys controlling stake in a local private corporation) or public transaction (a foreign corporation buys controlling stake in a local public - state-owned or municipal – corporation). Data available in CEE states shows that M&A transactions are still dominated by public transactions – privatisation deals. UNCTAD surveys published in the World Investment report series show that between 1990 and 2003 approximately two thirds of total FDI inflows in CEE countries were covered by privatisation transactions. All CEE countries opened their privatisation processes in (in a larger or smaller extent) to foreign companies and sold lucrative state-owned companies in key sectors (ex. telecommunications or financial sector)

Review of data available about cross-border M&A transactions shows that between 2002 and 2004 the total value of cross-border M&A deals in which CEE countries acted as sellers fell constantly. In 2002 foreign corporations bought local companies in total value of 17 billion USD. In 2003 the value of sales fell by 16% and reached only 14,4 billion USD. The fall of cross-border transactions continued also in 2004 when M&A sales fell again by 14% reached 12,4 billion USD. Outward cross-border M&A transactions (companies from CEE region buying foreign corporations) were very unstable between 2002 and 2004 when the total value of outward cross-border M&A transactions rose steeply from 1,08 billion USD (2002) to 10,6 billion USD in 2003. The rapid growth was followed by a huge decline in 2004 when outward cross-border M&A transactions fell to 2,1 billion USD.

The main factor behind the falling cross-border M&A sales in CEE is the near end of privatisation transactions in central European countries. Hungary is a good example, as in this country privatisation finished around the year 2000 and the value of cross-border M&A sales falls constantly between 2002 and 2004. Similar pattern can be identified in the field of cross-border M&A sales in Slovakia, Czech Republic and Poland – these

countries conduct the last large privatisation transactions and cross-border M&As fall steadily in these states. On the other hand, privatisation activities were booming in Balkan states between 2002 and 2004 and states like Bulgaria, Romania or Albania recorded the highest cross-border M&A sales in their history. Romania is a fine example, as the year 2004 was marked by the huge privatisation sale of the Romanian oil company Petrom.

Outward cross-border M&As are negligible in CEE countries, as their share in the global M&As is very low (less than 1% in 2002 and 2004). The year 2003 is a rare exception, in this year the share of cross-border M&A purchases of CEE companies reached 3,5% of the global M&A transactions. The steep rise in outward cross-border M&A activities in CEE in 2003 was caused by the strong activity of Russian corporations. These corporations were accountable for 82% of the total outward cross-border M&A transactions in 2003.

Why are the cross-border M&A purchases so weak in CEE countries? The most important factor is the lack of strong local companies. M&As are usually dominated by transnational corporations and the number of strong local TNCs is very low in CEE. The most companies were in situation after the fall of the communist regime in 1989, as they were undercapitalised and lacked modern technologies. Large companies could not compete with successful transnational corporations from economically developed countries and were gradually purchased by them through privatisation transaction. Today, the majority of important local companies belongs to transnational networks and are losing their right to make independent strategic decisions. Business strategies of TNCs and M&A decisions are usually developed in the headquarters and local branches have only very limited authority in these issues. The situation is not likely to improve in the field of cross-border M&A purchases in the future; foreign TNCs will continue to dominate the economies of CEE countries.

Table 2 Cross-border M&As in central and eastern Europe in 2002-2004 (billion \$)

	Sales			Purchases		
	2002	2003	2004	2002	2003	2004
Total	17 014	14 438	12 424	1 088	10 467	2 174
Hungary	1 278	1 109	453	242	949	317
Czech Republic	5 204	1 756	558	30	141	360
Poland	3 131	802	1 275	58	529	216
Slovakia	3 350	160	432	4	0	232
Slovenia	1 052	1	168	63	15	59
Estonia	15	14	18	0	11	0
Latvia	4	12	0	0	0	0
Lithuania	225	135	102	0	0	5
Romania	124	493	2 200	19	1	0
Bulgaria	138	383	2 685	8	0	30
Croatia	875	613	51	42	32	6
Albania	0	2	126	0	0	0
Macedonia	5	0	4	16	0	0
Serbia and Montenegro	268	863	118	0	23	0
Bosnia and Herzegovina	19	0	110	0	0	0
Russian federation	1 252	7 880	4 062	606	8 763	949
Ukraine	74	194	41	0	3	0
Belarus	0	2	5	0	0	0
Moldavia	0	19	16	0	0	0

Source: UNCTAD World Investment Report 2005, p. 325-327

The above-mentioned hypothesis can be easily proved. Currently, the most active M&A activities are found in Russia, where strong local oil and natural gas companies retained their independence and are gradually building a strong competitive position. The same is true for Hungarian companies

MOL (oil) and OTP (banking). These companies were not sold to in privatisation to a TNC and are owned by a wide array of domestic and foreign investors. That means that the business strategies of these companies are developed in Hungary and both companies aim to establish a strong regional position. MOL invested in Slovakia, Croatia, Romania and Poland, while OTP invested in Bulgaria, Slovakia and Romania³.

Another interesting questions is the relatively low share of private transactions on the incoming cross-border M&As in CEE countries. This phenomenon can be also traced back to the fall of the communist regime in 1989. There were no private corporations prior this date in CEE countries, so all corporations are relatively young (max. 15 years old). So foreign corporations outside the CEE region did not find (and still do not find) enough attractive domestic private companies. Most of the local private companies are small and offer no progressive technologies or know-how. This is the main reason why foreign TNCs turn their attention to other regions and do not seek M&A possibilities in CEE countries.

In spite of the low attractiveness of local corporations, there were several interesting acquisitions in CEE last years. The most attractive local private corporation can be found in the IT industry, especially in software development and internet services. Private companies in these areas focus on high quality human resources and often offer breakthrough technologies or products. Czech company Grisoft, provide of the well-known anti-virus software AVG is a good example, as the controlling stake of this local company has been purchased by a venture investment fund led by IT giant Intel for 52 million USD. Leading Slovak IT solution provider Delta E.S. could be another example. This local IT company has been sold to Israeli company Ness Technologies for 7,75 million USD.

³ PriceWaterhouseCoopers states in his 2003 report on M&A activities in CEE – “There were a total of 43 transactions originating from the nine countries forming part of the research. This represents a decrease when compared to 54 transactions in 2002. Nevertheless, total capital invested from these countries has more than doubled, from approximately USD 500 million in 2002 to about USD 1.1 billion in 2003. The growth was even more significant when considering the three countries of the Czech Republic, Hungary and Poland from USD 0.6 million in 2001 to USD 630 million in 2003. Out of the 43 transactions, 21 were targeted in the region of the surveyed countries as well, which represents a slight increase compared to 17 deals within the region in 2002. The most active country in terms of transaction origination remained Russia with 21 deals. Further important outward bidders were Hungary with seven, and the Czech Republic and Poland with five deals each.”

4. Cross-border mergers and acquisitions in Slovakia and Czech Republic in 2004

Overall, M&A in *Czech Republic* were quite strong in 2004; PriceWaterhouseCoopers⁴ registered 185 transactions (163 in 2003 and 144 in 2002). These numbers include all M&A transactions, the share of cross-border M&As was only 53%. This meant 98 transactions in 2004 compared to 86 transactions in 2003. The total value of cross-border M&As reached 2,543 billion USD which is also comparable to 2003.

In 2004, there were only 12 privatisation deals, most of them executed by the National Property Fund. The biggest public sector transaction and the only one of an amount over USD 100 million was the sale of Unipetrol to the Polish concern PKN Orlen for USD 411 million. Although this transaction was completed in 2004, it is still subject to EU approval and has thus not been included among the 12 transactions of 2004. The second biggest privatisation was the sale of the National property fund's stake in Sokolovská uhelná to Sokolovská těžební for USD 97 million.

In 2004, the top investor country for private sector deals was Germany with 12 transactions, followed by Austria (nine), Netherlands (nine) and – the new high ranking country – Slovakia with nine deals. In 2003, the top foreign investors were Germany, Austria, and the USA, whose transactions fell from nine in 2003 to six in 2004.

There were eight outward transactions made by Czech companies in 2004, two in each of Poland, Russia and Slovakia and one in each of Spain and Lithuania. The values of these transactions were not disclosed. Czech investors also took part in privatisation in the region and made three acquisitions in Bulgaria and one in Slovakia. In addition to this, CEZ was active in Romania in 2004, but this transaction is to be completed in 2005.

According to the PriceWaterhouseCoopers survey about M&A activity in *Slovakia* in 2004, M&As on the Slovak market increased to 85 publicly disclosed private sector deals, ahead of 61 in 2003 and 51 in 2002. Of the nine CEE countries surveyed by PricewaterhouseCoopers, Slovakia ranked fifth as in 2003, after the Czech Republic, Hungary, Poland and Russia, in the number of private sector deals. Given the size of the Slovak GDP, this ranking is unsurprising. However, in terms of the growth of the number of transactions, Slovakia ranked first as it grew unparalleled 39%. The proportion of cross-border M&A transactions including foreign investors

⁴ Source: Central & Eastern European Mergers & Acquisitions Survey 2004 – The Czech Republic

was 55% in 2004 which is below the 61% in 2003⁵. As privatisation is almost finished in Slovakia, it is not surprising that private transactions dominated M&A activities in 2004. There were only four notable privatisation transactions in 2004; all of them included privatisation of bus transport companies.

As in 2003 in 2004, the top investor country for private sector deals was Austria, followed by Czech Republic and Netherlands. There were eleven outward transactions made by Slovak companies in 2004, all of them to the Czech Republic, in particular two financial groups J&T (acquisition of 34% in PRE and 100% in football club Sparta Praha) and Penta (acquisition of betting company Fortuna and Severomoravské vodárny a kanalizace) were very active.

The largest cross-border M&A deals in Slovakia included the sale of a leading drug distributor company Fides to an investor from Germany (Phoenix International). M&A in the Slovak pharmaceutical industry was high, the other major transactions included the sale of drug maker Biotika Stará Lupča to Dutch company MEI Beheer and the purchase of minority shares in of Slovakofarma by multinational drug maker Zentiva. Again and as one might expect the manufacturing sector is attractive industry segment which consistently leads the interesting M&A transactions – for example, Tatramat sold 80% stake to German Stiebel Eltron, plus there were some divestitures of non-core assets, as sale of Thermosolar Ziar Ltd. Žiar nad Hronom to German Thermosolar Landshut,.

5. Conclusion

Analysis of available data collected by UNCTAD and other international organisations show that M&A activities in CEE countries are weak compared to the level of these activities in economically developed countries. The main reason of this fact is that the region lacks financially strong transnational corporations. TNCs are very important for M&A transactions as the majority of M&As involves TNCs as buyers or sellers. Most important corporations in CEE countries underwent privatisation and today they belong into transnational networks. As a result they have lost their independence in business strategies and the most important corporate decisions are made in the headquarters outside the region. Available data also show that the local companies that are active in the field of M&As do not have a foreign majority owner and are able to conduct independent strategic decisions (MOL or OTP). Russian corporations in the field of oil and natural

⁵ Source: Central & Eastern European Mergers & Acquisitions Survey 2004 – Slovakia

gas production are the main source of outward M&As in the region and it is likely that they will retain this position also in the future.

The time period between 2002 and 2004 also witnessed a slowdown of M&A sales in CEE countries. The main factor behind this trend is the approaching end of privatisation in central Europe (notably in Hungary, Slovakia and Czech Republic). Most state-owned companies have already been sold and public M&As are falling in this region every year. Private M&A transactions are not able to compensate the loss of public M&As as the number of interesting local companies is limited. The number of M&A sales will continue to fall or stagnate in the future as the privatisation will end in few years in most countries and the number of interesting companies is not likely to rise in the next years. IT companies could be a notable exception as many local software or internet developers offer progressive and innovative products.

References

- [1] CSABAY, M. Súvislosti členstva SR v EÚ z pohľadu proexportnej politiky. *Medzinárodné vzťahy*. 2004, vol. 2, no. 2, pp. 60 – 67.
- [2] GREŠŠ, M. SARIO *Slovenská agentúra pre rozvoj investícií a obchodu, š.p.o.* In Almanach 2002. Bratislava : Ekonóm, 2003. pp. 18-25. ISBN 80-225-1701-1.
- [3] PriceWaterhouseCoopers - *Central & Eastern European Mergers & Acquisitions Survey 2003*. Access from: < http://www.pwcglobal.com/cz/eng/ins-sol/publ/PwC_CEEMASurvey_2004.pdf>
- [4] PriceWaterhouseCoopers – *Mergers & Acquisitions in Slovakia in 2004*. Access from: < http://www.pwcglobal.com/sk/eng/ins-sol/survey-rep/pdf/MA_report_Slovakia_05.pdf>
- [5] PriceWaterhouseCoopers – *Mergers & Acquisitions in the Czech Republic in 2004*. Access from: < http://www.pwcglobal.com/cz/eng/ins-sol/publ/PwC_CZMASurvey_2004.pdf>
- [6] RUSIŇÁK, P. Priority portugalskej zahraničnej politiky. *Medzinárodné vzťahy*. 2003, vol. 1, no. 2, pp. 119 – 132.
- [7] TOMKOVÁ, B. *Obchodná politika EÚ vo vzťahu k Ruskej federácii*. In *Medzinárodné vzťahy 2004*. Proceedings of the International Scientific conference *Medzinárodné vzťahy 2004*. Bratislava: Ekonóm, 2004, pp. 203-206. ISBN 80-225-18888-3

- [8] UNCTAD *World Investment report 2004 – The Shift Towards Services*. Geneva: United Nations, 2004. ISBN 92-1-112644-4.
- [9] UNCTAD *World Investment report 2005 – Transnational Corporations and the Internationalisation of R&D*, 2005. ISBN 92-1-112667-3.

CURRENT TRENDS IN BANK MERGERS AND ACQUISITIONS¹

Miloš Bikár

University of Economics in Bratislava
Faculty of Business Management
Corporate Finance Department
Dolnozemska cesta 1
852 35 Bratislava
Slovak Republic
e-mail: milos.bikar@sk.hvb-cee.com
telephone: +421 903 531 112

Abstract

The last decade has witnessed an intense process of consolidation in the financial sectors of many industrial countries. This “merger movement” was particularly concentrated among banking firms and occurred in a global scope. As a consequence, many countries reached a situation of high banking sector concentration or faced a further deterioration of an already concentrated sector. Often a small number of large banks constitute more than two thirds of the national banking sector (e.g. measured by deposits). Banks compete in a differentiated loan market, hold reserves against liquidity shocks, and refinance in the interbank market. A merger creates an internal money market that induces financial cost advantages and may increase reserve holdings. We assess changes in liquidity risk and expected liquidity needs for each bank and for the banking system. Large mergers tend to increase expected aggregate liquidity needs, and thus the liquidity provision by the central bank. Comparative statics suggest that a more competitive environment moderates this effect.

Keywords: consolidation of banking sector; credit market competition; bank mergers and acquisitions; bank profitability

¹ The paper is the output of the internal grant N.153/2004 at the Faculty of Business Management

1. Introduction

Till the end of last year, when British bank Abbey National Bank was acquired by Spanish Banco Santander Central Hispano for EUR 13,9 billions, were bank mergers and acquisitions in Europe infrequent. Long-term discussions about sale of German HVB Group, hagridden by loss credits, finished in May 2005, when Italian Bank UniCredito announced the submission of Offer. The presented price of EUR 19 billions belongs to the highest within European bank mergers and according to Mr. Profumo, director general of UniCredito; new merged bank will save 9000 from total 130.000 employees. It will be the Number 10 in Europe and Number 1 in middle and east Europe, with total market capitalization above EUR 43 billions. In 1999, Italian UniCredito already bought its competitors Banca Commerciale Italiana, but further consolidation on Italian market seems to be difficult, therefore they were looking for other investment possibilities in Germany, French and middle and east Europe. It is interesting to see, that the last merger should be realized between banks from countries, those prefer more domestic, as international acquisitions.

Table 1 The biggest international bank acquisitions in Europe

Bank	Investor	Price (bil EUR)
<i>HVB Bank (GER)</i>	<i>UniCredito (ITA)</i>	19,0
<i>Abbey National (UK)</i>	<i>Banco Santander (ESP)</i>	13,9
<i>Generale de Banque (BEL)</i>	<i>Fortis (BEL)</i>	11,6
<i>CCF (FRA)</i>	<i>HSBC (UK)</i>	11,2
<i>Robert Fleming (UK)</i>	<i>Chase Manhattan (USA)</i>	7,5
<i>Bank Austria Creditanstalt (AUT)</i>	<i>HypoVereinsbank (GER)</i>	7,2

Source: Wall Street Journal Europe

During recent years a lot of European banks were active in the territory of middle and east Europe with the aim, to build the retail network and use the opportunity to take part in a privatization process of state banks. Some of the players were not successful; others had problems at home or are still waited for last chance. Looking at the map of current status of banking market, there are only a few privatization options, as most of banks were already sold to foreign investors, but some of them could be sold. There are some remaining state banks in Serbia, Monte Negro, Kosovo and Rumania.

2. European bank market

Since 1990, banking sector in middle and east Europe went through large transformation process, started with creation of two step banking system consist of central banks and commercial banks. The originally state owned banks were privatized, foreign banks obtained the licenses and opened offices, a new legislation framework was implemented included the effective bank supervision. The first foreign bank, which opened its office within the territory of east European countries, was Raiffeisenbank (1996 Budapest), and now the same bank (the first one with the domicile in EU) entry on the Belorussian bank market. The downfall of iron curtain in 1990 meant for Austrian banks the occasion of century. EU enlargement brings advantages for all countries, economic development for east and profit for west. Generally, not each country or industry field will win, but advantages will be more extended, unless disadvantages will be concentrated only to a few sectors. Finally, economy of middle and east European countries will grow, mainly due to domestic increase and EU enlargement effects and market expectations.

2.1 Consolidation of banking industry

At present international banks play the major role on middle and east European markets, whereby dispose of more then 90% market share in Croatia, Czech republic, Estonia and Slovakia, and more then 60% on other markets. Austrian and Italian banks are the most successful investors on those markets, whereas in Baltic countries dominate Scandinavian banks, but surprisingly not Germane, Netherlands or British banks. The Europe in bulk together with Turkey form the market with 750 millions of citizens. The “old EU” represent the market with 380 millions of habitants and average share of consumer credits on gross domestic product (GDP) reached 50%. The new 15 EU countries with population of 80 millions gained a share of consumer loans on GDP only 20%. That’s way there is a big potential for increase of consumer loans, credit cards and mortgages.

Even higher potential lies on the east, in Russia, Ukraine and Turkey, as on those markets lives approximately 300 millions inhabitants and share of consumer loans on GDP is lower then 5%. Turkey represents a very attractive market potential characterized by growing economy and boom of credit cards and loans. That reason influenced banks like UniCredito, HVB, Erste or GE Consumer Finance to star-up with banking business in this country.

Table 2 Share of net profit of the Group created in middle and east Europe (2004)

Bank Group	%
<i>Erste Bank Group (AUT)</i>	56
<i>Raiffeisenbank (AUT)</i>	51
<i>Bank Austria Creditanstalt (AUT)</i>	43
<i>UniCredito (ITA)</i>	19
<i>KBC (BEL)</i>	16
<i>Banca Intesa (ITA)</i>	12
<i>Société Générale (FRA)</i>	8

Source: UniCredito, BA/CA

Consolidation within banking sector on middle and east European markets continue. In June 2005, Bank Austria Creditanstalt announced that HVB Rumania would acquire Banca Commerciale Ion Tiriac. HVB Romania holds assets of EUR 1,4 billions with 13 branch offices, while Banca Tiriac brings 60 branch offices and total balance amount of EUR 706 millions. The last acquisition target in this region represented Delta Bank, the second largest bank in Serbia, which was acquired by Banca Intesa. Delta Bank will enlarge current network of 500 branch offices about additional 144. Another Serbian bank Jubanka was bought by Greek Alpha Bank and Novosadska Bank by Erste bank.

Currently there are only a few state owned banks in this region. In Rumania it is Banca Comerciala Romana, the largest bank with market share of 26%, which is subject of privatization since July 2005, and 11 potential investors registered interest. Another target could be Rumanian state saving banks CEC with more then 1600 branch offices and saving bank PKO in Poland. There are several other small private banks; those could be for sale, like Banca Transylvania (91 branch offices) in Rumania or Parex bank in Lithuania.

In Hungary OTP Bank, privatized through Budapest Stock Exchange (78% of shares are in hand of foreign institutional investors) means long-term acquisition target for investor. OTP announced its strategy being one of key regional player, that's way bought banks in Rumania, Slovakia and Bulgaria, and is going to open offices in other countries, for example in Czech republic. On the Hungarian market, OTP achieved dominant position, and dispose 25% of market share according to total assets, 30% share pursuant to deposit, 21% pursuant to loans and 35% on bank sector net profit. There are also other banks on middle and east markets, those would like to raise their market share, as those markets offer relative higher margins compare to old EU and still have non-saturated loan segment. Austrian Oberbank or

BAWAG, which bought Slovak Istrobanka, Czech Interbanka, Prague Office of Dresdner Bank, and will open new Office in Slovenia, indicated such interest. Leading Belgian Bank Fortis revised its firm strategy in Spring 2005, and its major priority is focused on new EU member states, where will open its Offices in Czech republic, Slovakia and Hungary, with the aim to increase the profit of the bank.

Table 3 Bank mergers and acquisitions in middle and east Europe in years 2002-2005

Year	Bank	Country	Buying Banks	Price (in EUR bln.)	Share (%)
2005	<i>Banca Ion Tiriac</i>	<i>Rumania</i>	<i>BA/CA</i>	<i>n.a.</i>	89
	<i>Delta Bank</i>	<i>Serbia</i>	<i>Banca Intesa</i>	278	75
	<i>Jubanka</i>	<i>Serbia</i>	<i>Alfa Bank of Greece</i>	154	89
	<i>Novosadska Banka</i>	<i>Serbia</i>	<i>Erste Bank</i>	73,2	83
2004	<i>Savings Bank of Albania</i>	<i>Albania</i>	<i>Raiffeisenbank</i>	105	100
	<i>RoBank</i>	<i>Rumania</i>	<i>OTP</i>	35	100
	<i>Delta Bank</i>	<i>Russia</i>	<i>GE Consumer Finance</i>	<i>n.a.</i>	<i>n.a.</i>
	<i>Kredit Bank</i>	<i>Ukraine</i>	<i>PKO Bank Polski</i>	<i>n.a.</i>	67
2003	<i>DSK</i>	<i>Bulgaria</i>	<i>OTP</i>	311	100
	<i>Priorbank</i>	<i>Byelorussia</i>	<i>Raiffeisenbank</i>	36	53
	<i>Postabank</i>	<i>Hungary</i>	<i>Erste Bank</i>	399	100
	<i>Banc Post</i>	<i>Rumania</i>	<i>Evrobank</i>	<i>n.a.</i>	53
2002	<i>Biochim Bank</i>	<i>Bulgaria</i>	<i>BA/CA</i>	83	100
	<i>Rijecka Banka</i>	<i>Croatia</i>	<i>Erste Bank</i>	55	85
	<i>Dubrovacka Banka</i>	<i>Croatia</i>	<i>Charlem. Capital</i>	24	100
	<i>Splits Banka</i>	<i>Croatia</i>	<i>BA/CA</i>	132	88
	<i>Zagrebacka Banka</i>	<i>Croatia</i>	<i>UniCredito</i>	626	82
	<i>Živnostenská Banka</i>	<i>Czech republic</i>	<i>UniCredito</i>	200	85
	<i>LG Bank</i>	<i>Poland</i>	<i>Nordea Bank</i>	115	99
	<i>Nova Ljublanska Banka</i>	<i>Slovenia</i>	<i>KBC</i>	435	34

Source: *Kapital* 9/2005

The other way, how to entry into engaged market, offers leasing services. The Spanish bank Banco Santander proved this strategy, when bought Czech company CCB Credit, proposing leasing and consumer loans.

Similar strategy seated French company Sofinco, member of Credit Agricole Group, by buying Czech leasing company ČP Leasing. The company is planning to extent its activities also in the field of consumer loans, as Czech republic accounted the biggest leasing market within middle and east European countries, similar to Austrian one.

2.2 Banking markets on the east

The latest trend in bank mergers and acquisitions is aiming on east markets. The further target of expansion represents un-saturated markets of Russia and Ukraine. The Russian Federation is as one of most interesting goal, mainly due to high level of GDP, the lowest individual income tax rate in Europe (13%), due to relevant average real wages growth and share of consumer loans on GDP only at 2% level. Actually Russia remarks the fastest economy growth during the last 10 years (5-7% in years 2001-2004). Russian banking industry is to atomize, there are more then 1100 registered banks, and on the other hand it is only 1/3 compared to 1995 stage. The half of deposits and 1/3 of loans are controlled by two state banks - Sběrbank a Vněštorbank. Gazprom Bank and private Alfa Bank maintain the other positions. Foreign banks currently holds limited market share on Russian financial market, only Raiffeisenbank a Citibank maintain visible position. The market consolidation could be foreseen in following years, because the trust of clients towards domestic banks is very low. Temporary collapse of banking market in 2004, caused by psychological factors, was a consistence of that. Presently we can observe the enormous increase of interest in Russia, the consumer credit market and credit card business enhance, is enough profitable and surprisingly low-risky (2%).

In 2004 were 154 registered banks in Ukraine and further 19 were in bankruptcy. The biggest Ukraine bank Privatbank, with total assets as of EUR 1,21 billions holds only 10% market share, followed by Aval Bank a Prominvestbank. After "Orange Revolution" took Ukraine EU direction, that's way is interesting for foreign investors, as never before. The bank industry in Ukraine must undertake a lot of standards and regulations, accustomed in developed countries, and after that, the consolidation process could start. Currently only Austrian Raiffeisenbank, among all of foreign banks, holds 2,2% markets share.

Lately international banks pursued their sharpness on the biggest potential market – China. Citibank and HSBS already bought some shares in big local banks. American Express and MBNA, second largest credit card issuer in USA, are already in China. In June 2005, bank of America announced its purchase of 9% shares of China Construction Bank (CCB) for USD 3 billions. CCB realized important changes in latest years and new

shareholder will bring its know-how combined with bank operation, risk management, credit cards and retail banking. Other foreign banks try to obtain stake in more than hundred lower commercial banks, among them reputedly only 1/3 dispose of sound credit portfolio. China belongs to one of the fastest growing economies around the world with more than 1,3 billions inhabitants. Since 2007, in compliance with GATT agreement, China's banking industry should be liberalized and open to competition.

2.3 Global banking trends

Global banking world has been changed compared to status from 90-tees, due to technical evolution. New hardware and software has been implemented in banks and insurance companies, Internet became an essential part of everyday life. There were a lot of changes, but banks are still here and will be here also in the future. The key role in successful banking plays know-how and trust of public, but not only technology. The importance of technology for banks and insurance companies will increase, and managers are fully aware of value added given by technology progress. At the same time, the competition is growing; cost cutting programs are implemented, simultaneously run consolidation process. Banks will change current fixed cost models to more flexible assurance of sources through regional competence centers and using specialized company by outsourcing of some services.

Within the European banking industry could be seen following trends:

- Growth of local and global competition
- Entry into new markets and local increase would be important factor
- Fulfillments of new legal regulations (Basel 2, Money laundering Act..)
- Stock Exchange requirements on information obligations
- International support to IT and operations
- Necessity of multi-language technologies
- Managing of more countries from one place („Multi-entity operations“)
- Sales support through more business channels
- Simple integration of banking systems
- Fulfillment of shareholders requirement (cost cutting, profit increase..)
- Growth of sales and „cross-selling“
- Flexible reaction on markets needs

Building of profitable retail network and trust of clients will be more and more important part of relationship between banks and clients. After Internet euphoria time clients clearly show, that branch offices must remain an influential part of sales channels. In Europe, the further cutting of numbers of branch offices could be expected, but simultaneously will be changed their role and design. Banks are opening small branch offices and micro-offices; their role will consist in consulting and advise to clients in selection of bank products and services.

Corporate finance business is very competitive and margins are long term on lowest levels. Retail banking is growing fast, but equally increase the competition. The most visible trend in late years has been seen in SME segment combined with new offered services. Small and medium sized enterprises require only limited number of services, like overdrafts and investment loans, and system of payments. SME segment still offers interesting margins, even though with decline tendency. Private banking is also developing, whereby grows the number of wealthy clients on total population. The more difficult is to manage such portfolio of private clients, what requires round experiences and know-how. Identification of client needs, communication schemes and clear description of banking products, seems to be very crucial facts, except of attractive marketing and effective day work with information.

3. Slovak bank market

The Slovak banking industry has remarked a dynamic development during last years, on the ground of implementation of know-how giving by foreign investors. At the same time corporate finance also moved forward, especially in point of required financial services. After restructuring of industry and strong FDI inflow, gradually grows the profitability of both industry and banking sector.

Per June 2005, there were 18 banks and 4 foreign bank offices active on the Slovak banking market. In respect to the entry of Slovak republic to European Union, Slovak National Bank presently register 81 notifications of foreign bank regulation authority about interest of foreign banks to run the business in Slovakia. Total assets of bank sector accounted SKK 1.333,3 billions (+14,65% compared to 2004 end year status) and generated the profit of SKK 7,57 billions, whereby the growth was incurred by accumulation of primary and secondary sources (current accounts and deposits). Banks holds loan portfolio of SKK 481 billions, each of that 6,6% are classified (total amount of adjusted items amounted SKK 26 billions).

Table 4 Ranking of Commercial Banks in Slovakia (In SKK thd, per June 30, 2005)

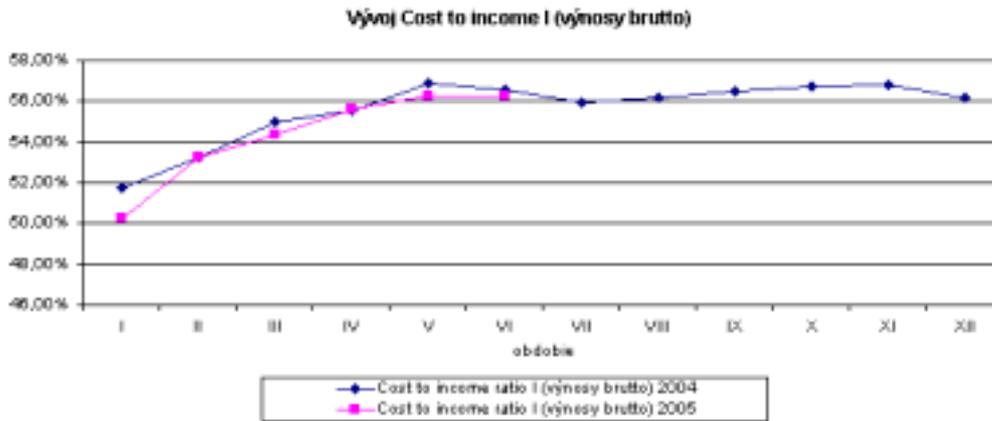
Bank	Majority owner	Total assets	Deposits by clients
Slovenská sporiteľňa	<i>Erste Bank</i>	274 023 546	168 864 771
<i>VÚB banka</i>	<i>Banca Intesa</i>	211 553 081	129 194 393
<i>Tatra banka</i>	<i>Raiffeisenbank</i>	178 457 829	137 132 973
Československá obchodná banka	<i>KBC Bank</i>	155 611 665	47 677 767
<i>ING Bank</i>	<i>ING</i>	78 730 928	27 534 351
<i>HVB Bank Slovakia</i>	<i>BA/CA</i>	67 727 190	25 266 022
<i>UniBanka</i>	<i>Unicredito</i>	59 487 165	47 732 687
<i>Dexia banka Slovensko</i>	<i>Dexia</i>	52 729 956	30 781 391
<i>Prvá stavebná sporiteľňa</i>	States SR, AU, GER	42 666 291	33 117 144
<i>OTP Banka Slovensko</i>	<i>OTP</i>	37 331 308	22 270 474
<i>Istrobanka</i>	<i>BAWAG</i>	33 309 982	19 115 183
<i>Eudová banka</i>	<i>Volksbank</i>	31 698 487	23 608 686
<i>Citibank (Slovakia)</i>	<i>Citibank</i>	28 777 431	20 120 255
<i>Poštová banka</i>	<i>Istrokapitál</i>	22 664 168	19 397 875

Source: Trend Analyses, October 2005

3.1 Bank profitability/market segmentation

Total yield assets of banking sector accounted SKK 1.246 billions per June 2005 (+14,2% compared to 2004 end year status), as the main increase was remarked in items bank-to-bank receivables (+ 32,78%), loan receivables (+ 8,72%), volume of securities (+8,6%) and foreign assets (+ 9,96%). Since 2004, the share of yield assets on total assets varies in band 93,3% - 94,0%. One of the key cost indicators, carefully measured by each bank represents cost to income ratio, inducted the amount of brutto yield in % absorb by general operating costs. The average value of cost to income ratio per whole banking sector reached 56,2% per mid 2005.

Figure 1 Cost to Income Development



The important part of total bank profits represent yields from fees and provisions. As margins by corporate loans dramatically decreased for the last three years, banks are forced to compensate this lower profit by higher fees and provisions. This trend could be watched also in first half 2005, as share of yields from fees and provisions on total bank yields jumped from 21,72% (December 2004) to 24,67% (June 2005). The income from fees and provisions cover 45,2% of general operating costs.

Looking at the market segmentation, the most rising market is featured in retail segment. Foreign investors have had good predictions by entry into Slovakian banking market, when they count with fast growing of credit for public. The total public indebtedness increases geometrically and till June 2005 achieved sum of SKK 136 billions. The splitting of loans is asymmetric, as first three banks holds 4/5 of total public debt. At present public debt in Slovakia attained only 10% on GDP, compared to average 50% in Euro zone. Interest rates by mortgage loans varies between 4,5% and 6,5% depending on creditworthiness. By consumer loans interest rates start by 5,2% and highest rates are by 20%.

In corporate business the high attention is dedicated to SME segment. In spite of the fact, that large corporate improved its financial position, some of them are financed from abroad, but generally they create higher profits and dependency on bank loans is therefore lower, the total amount of loans for the whole corporate sector is only slightly above the level from previous year. This is due to strong development of SME segment, where still bank could achieve interesting margins. Taking into account the banking sector as a whole, total increase of loans has been mainly caused by growth of public debts. In the latest years banks portfolios dominated big loans offered to large corporate, current trend force bank managers to compensate this decline by a large number of small loans, what is more laborious and costly, but solely

solution. Current level of interest rates will not allow to banks, maintain the same levels of margins as were in the past. Raising the share of loans on total assets could preclude the future decrease of profits, as presently banks hold a big amount of non-risk assets – state bonds and deposits by National Bank.

Table 5 Volumes of public loans in 2004 and 1H 2005 in Slovakia (in SKK mln)

Bank	Mortgages loans		Residential loans (not mortgages)		American mortgages loans		Consumer loans	
	2005	2004	2005	2004	2005	2004	2005	2004
<i>ČSOB</i>	496	280	–	–	186	–	354	730
<i>Dexia banka</i>	579	235	–	–	54	8	165	94
<i>HVB Bank</i>	145	126	38	–	–	–	29	39
<i>Istrobanka</i>	586	302	–	–	155	–	124	126
<i>Ludová banka</i>	278	194	–	–	83	–	337	107
<i>OTP Banka</i>	1 055	943	18	8	293	55	157	188
<i>Poštová banka</i>	–	–	–	–	–	–	271	0
<i>Slovenská sporiteľňa</i>	159	1 154	4 610	–	114	–	4 375	2 711
<i>Tatra banka</i>	2 593	1 398	–	–	1 206	–	1 226	1 214
<i>UniBanka</i>	404	328	–	–	–	–	110	57
<i>VÚB</i>	4 656	1 224	–	–	396	0	2 808	1 822

Since 2004, bank raised new product on the market – American mortgage loan, which is secured by mortgage, but the purpose is not specified. The most growing market was remarked by residential and mortgage loans. In 1H 2005, the growth achieved 4/5 from the total amount of mortgages loans in previous year. Banks put to credit SKK 11 billions of mortgage loans in 1H 2005 and hold totally SKK 50 billions of such loans in their balance sheets. Banks try to enable the access to loans for inhabitants, when partially canceled requirement of expert statements, especially in large cities. Some banks started to do their own statements, others declined fees. Generally banks try to shorten approval process and change internal rating levels inevitable for binding-of the rates. Except of the mortgage loans, client raised demand for consumer loans, in 1H2005 there was growth about SKK 7 billions, whereby the higher request will be expected before Christmas.

4. Conclusion

The other wave of mergers and acquisitions has started within the European banking industry, especially in middle and east European countries, but Russia and China are even more attractive countries. At the same time global banking sector has remarked a dynamic development during last years, on the ground of implementation of new technologies and the usage of Internet. Corporate business is very competitive with very small margins; more interesting segment is represented by SME. Faster movement could be seen in retail banking, mainly credit card business, mortgage and consumer loans. The future success of banks will be depended on the identification of clients' needs and building of the relationship between banks and clients.

Looking back over the past year, the Slovak banking sector was characterized by increasing sales, maximizing efficiency and cutting costs, majority of banks concurrently created a strong basis for continued successful business in the fields of retail and corporate banking. Besides expansion of the SME and municipal market segments, banks were also successful in reducing their non-performing loan portfolio and stimulating the domestic payment business. I am convinced, that in addition globalization, geographical proximity to other EU member states and consistent elimination of the differences in the economic and social background compared with other EU countries, it was already created a sound business environment for future growth and prosperity of banks, running business in Slovakia.

References

- [1] CARLETTI, E., HARTMANN, P., SPAGNOLO G. *Bank Mergers, Competition and Liquidity (ECB Working Paper 2003-292)*. Frankfurt an Main: European Central Bank, 2003. ISSN 1561-0810.
- [2] FOHLIN, C. *Banking Industry Structure, Competition, and Performance (Social Science Working Paper 1078)*: California Institute of Technology, 2000. Pasadena, California 91125.
- [3] FABER, M. An age of general acceleration is coming. *Journal of Kapitál*. 2000, no. 2, pp. 86 - 88.
- [4] FRIED, H.O., LOVELL, C.A., YAISAWARNG, S. Effects from bank mergers and acquisitions on loan services. *Journal of Banking and Finance*. 1999, no. 23, pp. 12 - 14.
- [5] JUŘÍK, P. European Banking Industry – Mergers and Acquisitions goes forward. *Journal of Kapitál*. 2005, no. 9, pp. 24 - 29.

SLOVAK BANKING SECTOR AFTER CHANGE OF OWNERSHIPS

Dana Tkáčová

Elena Fífeková

University of Economics in Bratislava

Faculty of National Economy

Department of Banking and International Finance

Dolnozemska cesta 1,

852 35 Bratislava

Slovakia

e-mail: tkacova@dec.euba.sk, fifekova@dec.euba.sk

Abstract

This paper is aimed at the evaluation of selected indicators of Slovak banking sector in the segment of banks, which went through the process of restructuring and have a decisive share in the Slovak banking market. The analysis is aimed at evaluation of quantitative development of the balance value, development and state of the capital adequacy and classified claims of the transformed banks. Next to the evaluation of nowadays situation, there are also some basic development trends of the Slovak banking sector outlined in the paper.

Keywords: *banks, investors, balance value, owners, capital adequacy, development*

1. Introduction

The restructuring process of Slovak banking sector in the years 1999-2001 was aimed at recovery and privatization of selected banks with state ownership majority. Restructuring of these banks before privatization meant their recovery- recapitalization in the form of ordinary stock increase with state help, displacement of classified claims from credit portfolios of the banks to specialized consolidating institutions. The losing claims were replaced through state owned securities. This process led to an increase of the capital adequacy and a change of the asset structure in favor of more liquid assets. During the year 2001 these restructured banks were privatized. The successive privatization resulted in an increase of the foreign investors share in the banks total ordinary stock subscribed and in permanently provided financial means to subsidiaries of foreign banks. The foreign investors share in the banks total ordinary stock subscribed and in financial means provided by foreign banks to their subsidiaries rapidly increased in the researched time period and by the end of September 2002 represented 85.0%. This increase was caused by the entry of foreign investors into the banking sector.

2. Devepment of selected indicators in the Slovak banking sector

After 2001 and after privatization of the biggest banks foreign investors gained¹ the ownership-majority in the Slovak banking sector. According to the volume of assets it means that the part of assets controlled by foreign owners amounts to more than 90 %, whereupon the part of the ordinary stock amounts to nearly 90 %.

¹ In the current, in Slovakia are active 22 banks: Slovak saving bank, General credit bank, Tatra bank, CSOB, ING Bank, HVB Bank Slovakia, First building saving bank, Uni Bank, Volksbank, Citibank (Slovakia), Dexia bank Slovakia, Istrobank, OTP bank Slovakia, Post Bank, VUB Wustenrot, Credit Lyonnais Bank Slovakia, Komerčni Banka Bratislava, CSOB biulding saving bank, Banka Slovakia, Commerzbank, Slovak guarantee and development bank and Eximbank. Beside this banks there are also 7 representations of foreign banks. In the structure of the mentioned banks are dominant banks with universal licence, represented are also specialized building saving banks. The ownership in the mentioned banks is private, except the Slovak guarantee and development bank, which has state capital at disposal. Foreign capital is represented in the majority of banks. Up to now the Post Bank is not privatized through foreign investors.

Table 1 Selected commercial banks, their owners and part on the ordinary stock

Bank name	<i>Shareholders</i>	<i>Part on the ordinary stock in % towards 30.06.2005</i>
<i>VUB a. s.</i>	Luxembourg SR	94,47 % 5,53 %
<i>SLSP a. s.</i>	Austria-Erste bank	98,00 %
<i>OTP s. s.</i>	OTP Bank, Rt. Private person	97,23 % 1,00 %
<i>Dexia Bank Slovakia a. s.</i>	Dexia credit bank slovak towns priv. and legal pers.	79,00 % 19,00 % 1,90 %
<i>HVB Bank a. s.</i>	BA – CA Austria	100,00 %
<i>Ing Bank a. s.</i>	ING Group Holland	100,00 %
<i>Istrobanka a. s.</i>	BAWAG Austria	100,00 %
<i>Volksbank a. s.</i>	Volksbank Int. AG Banque fed. others	76,30 % 10,00 % 14,70 %
<i>Post. bank a. s.</i>	Istrokap. Slovak cons. Slovak post others	55,00 % 37,00 % 5,00 % 2,90 %
<i>Slov. GD Bank</i>	SR	100,00 %
<i>Tatra banka a. s.</i>	Raiffeisen Austria Tatra Holding others	72,20 % 14,11 % 13,63 %
<i>Unibanka a. s.</i>	Unibank EBRD others	76,29 % 19,90 % 0,01 %
<i>Banka Slovakia a. s.</i>	BASL Allianz others	49,60 % 19,80 % 30,60 %
<i>CSOB a. s.</i>	KBC Bank NV EBRD others	89,97 % 7,47 % 2,56 %

Source: Annual Reports for 2005

Owners of the banks are strong foreign banking groups - ING, HVB, Volksbank, Wustenrot, UniCredito. The Czech banking is represented through the fourth biggest bank Czech-Slovak commercial bank. Through a subsidiary is also represented the Komerčni banka. The Hungarian banking system is represented by a subsidiary of the biggest Hungarian bank OTP. The foreign investors come from the European economy space and from

USA. They are established in the majority of the 21 commercial banks and in 7 representations of foreign banks.

2.1 Balance Value

Development of the Slovak banking sector after the change of the ownership will be valued on the basis of the quantity, development of the balance sum concerning banks, which pass the process of transformation-banks, which with an important measure participate on the increasing of balance value for the entire banking sector. We will not value the whole structure of the balance, but only the parts on the side of assets and liabilities, which considerable influence the balance state of a concrete bank. It's about the biggest Slovak banks: VUB a.s., SLSP a.s. and the Slovak investment and development bank (after changing of the ownership OTP a.s.)

The balance value of the mentioned banks decreased in the period before recovery. In 1997 the balance was 385.755 Mio. Sk., in 1998 362.802 Mio. Sk. and in 1999 352.839 Mio. Sk. The reason was the entrepreneurial activity of banks. The banks recorded losses, the funds from clients stagnated. In 2000 the balance value reached the sum about 377.128 Mio. Sk. This increase of the balance value was connected with the recovery and with the renovation of the trustworthy of the biggest banks.

Table 2: Balance sum of selected commercial banks to the 31.12. (in million Sk)

	2000	2001	2002	2003	2004
VÚB	165 287	174 162	194 716	191 338	218 837
SLSP	184 452	202 058	205 037	208 338	237 354
IRB/OTP	27 389	21 344	18 959	25 106	33 873

Source: Annual Reports of SLSP, A. s., VÚB, A. s., IaRB, A. s., for 2000, 2001, 2002, 2003, 2004

General Credit Bank VUB a.s. strengthened it's standing on the Slovak banking sector. In 2001 there have occurred significant changes in the balance structure. The part of securities has increased by contemporaneous decrease of credit part. Part of credits has been moved to consolidating institutions in the frame of reclassification of credit portfolios. The entrepreneurial activities of the bank have been oriented to high yielded and less risky assets. The balance sum has increased in 2002 about more as 11 % against the year 2001. On the Slovak banking market the bank kept the 20 % stake. In 2003 the balance sum has decreased, which was caused by dropping of entire consolidated assets. In 2004 the VUB was very successful. The bank

strengthened business position and improved the finance results and became the most profitable bank in Slovakia. For the first time the bank received an award the best bank in Slovakia from the journals Euromoney and The Banker.

Slovak saving bank (SLSP a.s.) reached in 2001 a balance sum about 202,1 bln Sk, which was an increase about 9 % against the previous year. In 2002 reached the SLSP a balance value about more than 205 bln Sk. It can be said, that in 2002 the bank has been transformed to a modern banking institution, which his activity orientated to the client. The result was the reclassification of the branch-office net and the separation of the retail- and business banking. In 2003 the Slovak saving bank is beginning to manage the credit risk and to monitor the portfolio and there will be prepared in cooperation with other banks the first credit register for private persons in Slovakia. In harmony with the new Basle agreements about capital the saving bank is involved in this program through the Erste Bank for the implementation of this agreements. In 2003 the saving bank has determined the starting assumption for collecting of statements about not repaid credits and losses and proposed a new rating system for the retail business. The quality of the asset portfolio has in 2003 improved the part of the assets with a high risk level has decreased from 14,0 % in 2002 till 8,6 % in 2003. The assets are covered through correcting items and reserves about 101 %. The 2004 can be characterized as the most successful year for the bank concerning the increase of the balance sum. There was an increase against 2003 about 14 %. To the increase of the balance sum has contributed a good economic management just as the management of the credit portfolio. Changes in the legislature proposed so, that they will strengthen the position of the creditors and so there will be the guarantee, that claiming of credits will be more successful.

OTP a.s., the activity of OTP (before privatization: Investment and development bank) was for a long period in a specific situation, to which the bank got in 1997. The bank was in a forced administration, managed by administrator authorized to perform the forced administration. Whereas the forced administration the bank activities have been subdued. After ending of the forced administration the activities of the bank have been renewed. In 2001 the privatization has taken place through a foreign investor and with the trying to reach a good position on the Slovak banking market. In 2001 the balance sum decreased by more than 6 bln Sk. The reason was the change of the asset structure and displacement of classified claims. High balance sum in 2000 was connected with the balance recovery of the bank and with the meaner of settlement of repo deals. Artificially has been inflated the volume of assets, when the National Bank of Slovakia came in a sterile position

against the banking sector. The balance sum of the bank reached in 2002 a value about 18,9 bln Sk, which was a decrease about 8 % in comparison with 2001. The reason was the transformation of the bank. In April 2002 the bank has been privatized. In 2002 the bank stated a loss, which occurred as consequence of building of correcting items and reserves on the property, bank claims and transformation costs. The 2003 was a successful year for the bank activities. The sources have been increased and also introduction of new credit products for the population and for the entrepreneurs. The stated reality has contributed to the increase of the balance sum, which reached in 2003 a value about 25 Bi. Sk. This tendency continued also in 2004. For this period is characteristic the consolidation, when on the Slovak banking sector the deposits have been moved from the banks to the administration companies. The strategy of the bank is to reach long-term partnerships with the clients, how the bank doesn't mean only entrepreneur clients or retail, but the bank is developing business contacts also with self-administration units. This strategy has been confirmed as correct, because the balance sum has increased and reached in 2004 nearly 40 Bill. Sk. To the increase of the balance sum have contributed about all the deposits of clients (plus 27 % yearly increase), issued securities (volume about 2,5 Bill.Sk) and granted credits.

2.2 Adequacy of the own sources (capital adequacy)

The capital of the bank is the most suitable source of protection against insolvency. In all sophisticated economies enjoy the bank capital a big attention. From the capital the bank can cover eventual asset-looses without threatening of the client deposits. But the condition is an adequate level of capital. The most important coefficient is the Capital Authorization Ratio (CAR) often named as Cooke - Ratio (capital-assets ratio), defined as ratio of capital to the sum of risky assets and credit coefficients of non-balance items.

Recommended balances are 0, 20, 50, 100 % resp. converting coefficients 0 - 0,2 - 0,5 - 1,0 how the concrete assignment of the balance to the given asset is in competence of each country. The rules of adequacy of the own sources have determined the „Basle Committee of Banking Supervision“.

Because his task is to cover of the credit risk, capital for its calculation has to be divided to three parts: own capital - supplementary capital - short term subordinated debt. For the calculation of the adequacy of the own sources is the supplementary capital limited to 100 % of the own capital or at least 50 % of capital must be own capital. Subordinated debt is

determined for covering of the market risk.

The level of capital adequacy depends directly proportional from volume of capital and indirectly proportional from the level of risky weighted assets and apart from balance items. The bank can influence the level of the capital adequacy (increase it) in double manner. Either through the increasing of capital or through decreasing the volume of weighted assets. Increasing of capital through issuing of securities by the same profit has the effect of decreasing of the value of the shares and with it to reduce the value of shareholder parts with the following negative response by them.

The bank can decrease the volume of risky weighted assets with sinking of granted credits with higher risk weights resp. the bank will prefer low risky activities for example acquisition of government securities, or the bank will undertake alternative activities, for example new credit deals, relative secure syndicated loans and others).

Low coefficient of capital adequacy is an advertiser that there is a high risk level of the bank activities. Internationalization of conditions for bank undertaking protects the banks against high risks. If there is interest to maintain the same competition conditions in the banking sector, similar measures as the indicator of capital adequacy have to be settled for all institutions, which offer their services, similar to the bank activities.

Table 3: Capital adequacy in chosen banks (in %) in Slovakia

	<i>1988</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
VÚB	0, 30	16, 10	35, 20	33, 50	23, 40	-
SLSP	6, 60	12, 10	21, 10	22, 50	24, 25	16, 84
IRB/ OTP	- 27, 80	12, 50	53, 60	76, 20	33, 43	17, 20

Source: Annual Reports of SLSP, A. s., VÚB, A. s., IaRB, A. s., for 1988, 2000, 2001, 2002, 2003, 2004

In 1988 no one of the transforming banks reached the necessary level of capital adequacy (adequacy of the own sources). The IRB (Investment and Development Bank) came even into red figures as capital adequacy reached the level minus 27,8 %. Bad results reached also the Slovak Saving Bank (SLSP) and the General Credit Bank (VUB). To the unfavorable capital adequacy in the mentioned banks have contributed above all losing debts and a low level of the own capital in connection to the high risk assets.

In 2000 the banks reached the required level of capital adequacy. This development positive influenced the running reclassification of the credit portfolios in these banks. After changing of the owners the banks reached each year the required level of the capital adequacy.

OTP reached in 2002 the capital adequacy on the level 76,2 %. The bank fulfilled the coefficient of the capital adequacy above the standard, which was caused with it, that the bank was in 2002 privatized and very circumspect granted credits which risk level has a direct impact on the level of the mentioned coefficient.

2.3 Classified claims

The highest part of losing claims on the entire claims was in Slovakia in 1990-2000 in transforming banks mainly in VUB,SLSP and IRB. The lowest part of losing claims was in Building Saving Banks (BSB). The reason is the reality that the BSBs began with selling of their products in 1992. The BSB grant the standard building credit after six years of the client's saving on the account of building saving. That means, that in the observing period the clients didn't repay the building credits, resp. the volume of the repaid credits was in this period still relatively low and therefore the banks didn't register any classified claims.

Table 4: Classified claims from 1993 till 2003 (in million Sk)²

	<i>VÚB, a. s.</i>	<i>IaRB, a. s.</i>	<i>SLSP, a. s.</i>
1993	16 156,4	4 447,3	3 050,5
1994	33 594,9	6 328,9	13 635,1
1995	39 394,0	-	-
1996	34 152,9	-	-
1997	35 316,5	-	-
1998 ³	42 606,1	7 449,4	22 863,7
1999	21 671,2	2 452,5	8 354,1
2000	9 707,3	174,7	1 858,4
2001	4 872,0	144,7	1 712,7
2002	2 680,0	OTP 68,9	1 155,4
2003	1 878,0	OTP 159,0	1 031,7

Source: Annual Reports of SLSP, A. s., VÚB, A. s., IaRB, A. s., for 1993 to 2003

² Statements are taken from materials of the NBS. Sign - means, that the statements have been inadequate. Statements for the years 1998-2000 have been chosen from Trend top 2002 p.17

³ In the years 1998-2000 the announced classified claims are reduced by created correcting items.

The part of transforming banks on losing claims was in 1997 represented by 68,13 % and in the first quarter of 1998 already by 68,58 %. The break happened in 2000 after reconstruction of credit portfolios in the announced banks. From the balances have been displaced the losing claims into the consolidating institutions and have been replaced through state owned securities.

Table 5: Displacement of credits to consolidating institutions (in million Sk)

Bank	Displacement of credits		
	to KOBL	to Slovak consolidated	together
General credit bank	7 602,8	58 641,3	66 244,1
Slovak saving bank	2 398,1	29 998,1	32 396,2
Investment and Development bank	9 507,5	4 969,2	14 476,7
Displacement of credits in the first stage	19 508,4	62 710,2	82 218,6
Displacement of credits together in the second stage	0	30 898,4	30 898,4
Together credits and guarantees without cooperative building of flats	11 395,3	93 608,6	105 003,9
Together credits and guarantees with cooperative building of flats	19 508,4	93 608,6	113 117,0

Source: NBS

In 2004 was the state of claims according to unit categories in the named banks as follows:

Table 6: Categories of claims in chosen banks to the 31.12.2004 (in million Sk)

	<i>VÚB, a. s. year 2004</i>	<i>SLSP, a. s. year 2004</i>	<i>OTP, a. s. year 2004</i>
<i>Standard claims</i>	70 165	36 553	20 354
<i>Standard claims with reservation</i>	15 898	13 212	728
<i>Non standard claims</i>	1 916	922	49
<i>Doubtful claims</i>	594	491	122
<i>Losing claims</i>	1 802	3 513	1 249

Source: Annual reports of VÚB, A. s., SLSP, A. s., OTP, A. s.

As conclusion we can state, that through the reclassification of the credit portfolios the mentioned banks recovered with the consequence, that the granted credits in the period after the privatization changed the structure and by it also the classification in unit classification grades. Favorable is also the development of the balance value and the quality indicator- the adequacy of the own sources.

3. Tendencies of banking development

Foreign capital established in the Slovak banking sector is the promise, that the banks will enterprise in a comparable level with sophisticated countries. New trends of banking enterprise are determined above all with advancing globalization. Globalization⁴ is supported by development of new technologies, which cause the retreat of traditional branches and expansion of mainly services, including financial services.

The current financial world has the tendency above all to

⁴ Globalization stated the mutual association, mutual connections and dependencies between the parts of the world system. Initially the term globalization means only an economic appearance, which characterized the unceasing spread integration and interaction of national economics and will be realized in frame of the international market and financial flows. In last time, the phenomenon globalization always more means as a spiritual and cultural connection, as a virtual reality without boundaries, which make it possible to contact countries, societies, people and others from the opposite ends of the globe. In literature we can find very often three aspects of globalization: technological, economical and political. Technological aspect of globalization follows from the connection in development of communications- and computer technology, the economical aspect follows from the movement on the capital markets which eases the existence of multinational companies and the political aspect is the combination of market and democracy.

universalization, supported though globalization processes⁵ and at the same time in frame of universalization to a consistent specialization by granting of services.

The Slovak banking sector is a universal one, where prevail small banks in view of capital volume. These banks will have the problem to keep standing in existing competition on the field of universalization. The foreign shareholders should ease the banks to adapt them in this area, above all from a long term view. If the banks here not succeed there can start mergers and acquisitions between our banks, resp. very small specialization above all by little banks. The question is, if the banks will be able in the current competition to gain new clients resp. to maintain the old clients and if their can resist against the pressure to reduce the costs and to increase the productivity and effectiveness.

The question is also, if the banks as granting institutions of financial services will be able to keep in the future their sovereign position, or in consequence of the a. m. influences the banks will gradually loss this position.

The bank as finance mediator on the base of it's own information about market, clients, their needs and habits, their economic situation - was able in the best way to valuate the free capital of clients resp. to advise clients in professional way, who need free capital, which is temporary available on the market. This advantage the banks are losing with development of information technologies. Today, the economic subjects can receive information without effort (for example by means of internet), which was in the past possible only for banks resp. other institution of the financial market.

In the world is the trend of decreasing the part of bank credits and loans on the whole volume of bank credits and loans to the private persons and enterprise subjects⁶. The reason is a big boom of alternative sources for

⁵ Global tendencies of world development in the banking area and the 21. Century restrict the following connections (Sometimes it's very difficult to distinguish, if there is a reason, or the consequence of globalization or if there is an appearance, which directly not connected with globalization, but in the final consequence it's determined through the effect of globalization): consolidation of banks and financial institutions, securitization and desintermediation - as appearance of the securitization trend, financial innovations- financial derivatives and automatization of banking operations, internationalization - forming of overnational economic units, institutionalization - dominant standing will get institutional investors, for example pension funds, insurance companies, investment funds, intellectualization and reform of bourse systems.

⁶ In USA, which predetermines the trends of development of the world economy, decreased the part of banking credits on the whole granted credits to private persons and entrepreneurial subjects from 36 % in 1974 to 22 % in 1994. This trend continues till the present time.

financing of enterprise activities.

The ordinary reaction of banks to this reality:

- Merging to bigger units and at the same time the banks connect their activities with other branches of the financial market: with pension funds, administration companies, insurances and others and through it they strengthen their capital stock.
- Increasing the quantity of granted services.
- Spreading of activities to big geographical distances. Managing of banks about big distances required a thorough information and managing system.
- Acquiring of new information systems, which make it possible to take very quick moves of funds and that leads to a big increase of their quantity and with it to an increase of transfers and to increase the quantity of new financial products.
- Decreasing the number of their branches and subsidiaries for economic reasons. They will be replaced through full-automated centers.
- In spite of mentioned measures, the part of traditional banking activities is going down. The failures of profits the banks therefore try to replace through new business activities, resp. through increasing of fees for granted services.

The banks lost almost their monopoly position on the market for granting of financial services. The big banks are not able to compete to small flexible and creative subjects, which are able more flexible to adapt to new technologies and make profit from it. The banks have competitors in other sectors of economy, which are active in research and innovation area and are able to adapt new technologies in very short time and to make a profit from it. The banks very often in consequence of their complicated structure of connections and processes are not able to react to the changing surroundings and to the constantly changing needs of clients.

The radical changes in the banking sector are awaited in connection with transition from paper money to money in form of dates - electronic, digital, cybernetic, which takes with it the development of technologies (cash money obvious very early don't vanish, but the size of their using is gradually decreasing).

Also direct settlement between different economic subjects will be obviously in near future already limited, resp. will exclude the link between - the bank as mediator of said operations. That can be a risk not only for the

commercial banks, but also for currency authorities, the central banks, which task is to coordinate the quantity of money in the country.

4. Conclusion

In the current world a lot of non-banking subjects is active in traditional banking spheres. A big advantage they have against the banks is, that they are less regulated (the banking system is in market economy the most regulated branch) and are often more flexible and innovative. If the banks want in this competition to maintain their position, it is inevitable, exactly to identify the needs of their clients and as quick as possible to adapt them. Obviously the banks should grant their clients a whole set of financial services. The banks should more grant classic bank products, which follow from traditional active and passive operations. Other services they have to leave to companies, which can grant such services more flexible and effective. Further space for banks in their activities opens in their subsidiaries, resp. in cooperation with external companies. The banks have the possibility, to cover them with a set of products and to grant them complex services from consulting services through granting of financial products, controlling till risk management. In that way the client should gain a whole set of services of good quality to attractive prices and the banks will gain clients of good quality for a long term.

References

- [1] STANĚK, P. : *Globalization, European Union and Slovak Republic*. Bratislava, Institute of Slovak and world economy SAV 2000
- [2] WILSON, J.S.G. : *Management of bank assets and liabilities*. Bratislava, Elita 1995, ISBN 80-85323-69-9
- [3] FIFEKOVÁ, E., FIFEK, E., HORVÁTOVÁ, E.: *K úlohe bankového sektora pri reštrukturalizácii ekonomiky SR v transformačnom období*. Acta academica karviniensia, 2003, č. 1, ISSN: 1212-415X, pp.89-103
- [4] TKÁČOVÁ, D., CHOVANCOVÁ, B., FIFEKOVÁ, E.: *Bankový sektor Slovenskej republiky, náčrt jeho vývoja, privatizácia a stav po privatizácii*. Nová ekonomika. Vedecký časopis Obchodnej fakulty EU v Bratislave, 3, 2004 č. 1, ISSN 1336-1732, s.80 -86
- [5] Annual Reports, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005
- [6] The Banker, 2003
- [7] The Bankers Almanac. July 1997. Reed Business Information.
- [8] Global Finance

STRONG AND WEAK POINTS OF ACTUAL ROMANIAN BANKING SYSTEM

Jenica Popescu

Alia Opritescu

The University of Craiova
Economic Sciences Faculty, Finances Section
A.I Cuza street, 13
600022 Craiova
Romania

e-mail: jenica_popescu@yahoo.com

telephone: +040 251 414 398

Abstract

The paper presents the characteristics of Romanian banking system reform between expectations and achievements. The role of the first bank institution of the country is being disclosed but there are also a series of considerations towards the second level of the banking activity, that is the commercial banks. The main trends which characterize their evolution during the transition years are brought into discussion, trends of which, the most indicative in our opinion are the concentration and the segmentation. These positive trends, concerning the improvement of the general economic environment, as well as the concentration of the stock holdings of The Romanian National Bank towards the qualitative sides of the surveillance process, have left their mark on the evolution of the indicators which define the state of our banking system. The economic- financial indicators as well as those of bank discretion certify that the Romanian banks have made significant steps towards the criteria imposed by the European integration.

Keywords: *reform, banking system, European integration, concentration, segmentation*

1. Introduction

One of the professors who had in his hands the management of the economic education before and after 1989 stated in one of his books that: “the most far-reaching and permanent slogan, as well as the less defined one, is the reform. In the name of the reform there have been taken correct decisions, but the worst errors of politics and management have also been done”[3]. In this context, we find it necessary to express our opinions concerning the strong points and especially the weak ones of the contradictory process which had as main goal the creation of a new banking system, which, in the opinion of some important economists, represents one of the restrictions of including the Romanian banks in the select club of the western banks.

The first steps which foreshadowed the placing of our banking system on the competency pedestal have grown up together with the elaboration of the laws concerning the bank activity and the status of The National Bank of Romania, that is laws number 33/1991 and 34/1991, which have been completed afterwards by laws no 101/1998 and 108/1998. Naturally, once the two laws were adopted, the premises of a new banking system on two levels have been formed, premises of western origin, competitive premises in our opinion, the system “type mono-bank” being abolished [2]. As a consequence, the levels of the banking system have as pylon, on one hand, the issuing bank – The Romanian National Bank – and, on the other hand, the commercial banks which function as universal banks. The National Bank of Romania, as central bank, has taken over from its former balance all the extern assets, and from the intern assets the governmental credits. As means of covering, it has taken over the external passives from the balance, the monetary mass and a significant part of the structure “personal funds and other funds”.

The commercial banks, newly created, have taken over from the assets of the central bank the non-governmental credits, and, as a means of covering, the deposits of the non-banking clients from the passive, where the weight was hold by the deposits of the population with 48% of the monetary mass [2]. Hoping that we are closer to truth, in our opinion, we consider that the above mentioned author takes into consideration only the assets taken over by The Romanian Commercial Bank. The other banks having the status of universal banks have taken over the entire inheritance of the past specialized banks. The new commercial banks have taken over the entire portfolio of credits offered before to the enterprises with public capital, credits which were out of the spirit in which the crediting activity would have to act in the future. Moreover, taking into account the fact that the commercial banks had to face since “swaddle” a reduced capitalization base,

the funds of the banks from the past on which they started functioning represented only 5.5% of the passive, and taking into consideration the harmful effects or the “devastating” effects of the inflation, the natural erosion suffered by this “survival core” starts appearing.

2. A view on strong and weak points of banking system reform

Nevertheless, we shouldn't omit the fact that, in order to stimulate the competency, using the new legislation, new banks with public, mixed, private, local or foreign banks which opened in Romania their own branches. The new banks could only start their activity only after they had obtained an authorization to function, a document issued by The National Romanian Bank, more exactly by the Commission of Settlement and Surveillance, an organism which issued norms and settlements concerning the volume of the social capital, the minimum amount of payment at the moment of subscription, as well as the forming of reserve funds and prevention of risks. The opening of branches of some banks by foreign judicial persons has been settled by the law concerning the functioning of foreign branches and organizations.

Without any doubt, an economy in "resuscitation" in order to go through a road from imprisoning to freedom, could not offer a proper environment in order to reshape and develop the banks. The road from the order economy to that of market hasn't been easy for anyone. The difference was in the traps of this road as well as in the chosen means to go through it. For Romania we believe that many internal and external factors have put their print on this road, the consequence being the strong and the weak points as well as the climbing and descending of the banking system. Thus, among the weak points of the reform, we mention the most significant ones:

- the slow rhythm of the process of legislative and institutional reconstruction compared to other countries from Central and Eastern Europe;
- the low financial power of the new banks, appeared especially because of a reduced capitalization as well as because of some credits taken over from the old banks;
- the insignificant competency in the newly created banking system, some banks holding the majority of credit market;
- the lack of experience and the inherited mentality, which is often not sensible to the new;
- the weak development of territorial network;

- the lack in the consistency of the concept of bank autonomy, lots of decisions being adopted under the pressure of politics;
- the contradictory behavior of bank managers related to the orientation of investments towards the public area and not towards the private one;
- eluding the most basic principles of bank discretion, that is giving credits only on political interests or mainly personal ones.

Among the strong points of the reconstruction of the banking activity, full of content, and full of effects in the real economy, we mention the following:

- the abandoning of centralized planning. The road towards the market economy has created multiple possibilities of assertion but new responsibilities as well, especially towards the capitalization of resources congruent with the criteria of economic performance and profitability;
- the orientation of activity, taking into account the principles of the bank marketing, towards the customers' desires. The commercial banks have the possibility to offer various products and services, in accordance with the market requirements, trying to satisfy the consumers' preferences. The fact that the bank institutions connect to the vectors of market coagulates the general tendency of evolution of the Romanian economy towards a performance one, connected to the circuits of international banks;
- the stimulation of competency between banks. The new economic environment has obliged the commercial banks to compete when dealing with the interests, the commissions, specific to the products and services that they offer to the consumers. The competency environment promotes the quality of services and encourages the assimilation of new ones. The quality and the price of products and services offered by banks feel the impact of competency, a phenomenon which favors the evolution of bank products market in order to assimilate the features specific to a market of consumer;
- the assimilation of a performance bank politics. The competency between banks and the discretion norms promoted by The National Bank of Romania have favored the banks which, while functioning, have assimilated and selected healthy managerial procedures, combining the criterion of a maximum profit with that of a bank discretion;
- attracting a higher number of specialists by a strict selection. Once new banks appeared, once the activity of the existing ones multiplied, the number of hired persons has raised, the banking field becoming one of the most dynamic areas, a phenomenon considered positive, taking into account

the decline of the other areas of economy.

Noticing the multitude of weak points, which we consider consistent, but especially the strong ones, offers us the logical support in order to present the steps on the road towards the reform of the banking system.

3. The structure and characteristics of actual Romanian Banking System

What we should mention is that the responsibilities presented in the bank laws adopted after December 1989, have been put again, after almost a century, on the shoulders of the first bank institution of our country. They can be synthesized as it follows: The National Bank of Romania is the central bank of the Romanian state "having a key position in the banking field, around which all the agents of monetary and financial life gravitate, every citizen who uses a banknote or a coin bearing the marks of the country and of its unique emission bank"[4]. In its quality of central bank, The National Bank is the unique issuing institute of the country, which settles and leads the monetary, currency politics, the credit and payment politics, assuring the surveillance of the banks which it authorizes to function. Its responsibilities find their support in the functions which it exerts, that is: the emission, the circulation and the withdrawing of monetary signs; the stabilization and promoting the monetary politics foreseen by the state authority; the administration of the currency politics; the administration of management having the quality of bank of the banks – bank of Romanian state; the settlement and surveillance of payment system. Concerning the second level of the banking activity, that is the commercial banks, we consider that the main trends which characterize their evolution during the transition years would be: their numeric growth, creating the branches, agencies networks, developing the information structures and new departments specific to the modern banking system, that is those with management and marketing, all in order to raise the profitability and to consolidate the market position.

But, we have to remember that, although the territorial extension hasn't been one of the most rapid ones, the number of operative units compared to the number of inhabitants places Romania behind the other European countries. For example, in countries part of the European Union, an operative unit reverts to 1,700 inhabitants, in countries from Central Europe to 11,000 inhabitants, while in Romania the amount is of 23,500 inhabitants.

The developing of information infrastructures as well as of new departments, like those of management and marketing, have induced changes in the evolution of bank system, the most indicative ones being the

concentration and segmentation. At the end of 1998, at almost 8 years after the beginning of the reform which had as main objective the reconstruction of the system, the 4 banks with majority of capital and the House of Economies and Consignments were still dominating the market, holding almost 70% of the assets and 56% of the social capital from the system. In the following years, as a result of the information of table 1, the market share of the above mentioned banks was lower taking into account the number and the banking operations.

Table 1 The volume and the share of operations coming from banks with majority state capital at 31.12.2000

<i>Banks with majority state capital</i>	<i>Assets</i>		<i>Social capital</i>		<i>Deposits and attracted availability</i>		<i>State title in portfolio</i>	
	<i>mld. lei</i>	<i>%</i>	<i>mld. lei</i>	<i>%</i>	<i>mld. lei</i>	<i>%</i>	<i>mld. lei</i>	<i>%</i>
<i>The Romanian Commercial Bank</i>	66240,5	29,6	4308,6	31,3	48586,3	29,7	11632,6	26,3
<i>House of Economies and Consignments</i>	21931,0	9,8	647,0	4,7	19303,6	11,8	13313,4	30,1
<i>Eximbank</i>	5818,4	2,6	316,6	2,3	916,1	0,56	190,2	0,43
<i>Agricultural Bank</i>	5147,1	2,3	110,1	0,8	4089,8	2,5	39,8	0,09
<i>Total banks with majority state capital</i>	99137,0	44,3	5382,3	39,1	72895,8	44,56	25176,0	56,92
<i>Total bank system</i>	223785	100	13765	100	163590	100	44230	100

Source: the state banks hold almost a half of the total deposits. The Financial Paper, 30.01.2001, page 5.

The leader position of the four banks is relevant, first of all because they held together at the end of year 2000 a share of 44.3% of the balance assets in the banking system, with a value of 99,136.9 milliards lei of a total of 223,785.4 milliards lei.

Although the banking sector did not meet any major structural modifications in 2003, the extension of the market share (at 62.5%) was influenced by the raise of the bank assets, as a result of deposits coming from the non-banking persons, but also as a result of an increase in the personal funds. Once the biggest bank with state capital is privatized, The Romanian Commercial Bank, the share held by the private sector will be more than 28%.

The main feature of the Romanian bank system remains its concentration, a number of five banks (The Romanian Commercial Bank, BRD - Groupe Societe Generale, Raiffeisen Bank, CEC, ABN Amro Bank), dominating the market at the end of 2003, with a share of 61.7% of the total assets, 56.8% of the total of credits and 62.6% of the total of deposits, as it can be observed in table no. 2.

Table 2 The share of banks and of foreign branches in the volume of Capital

	<i>Social capital/ subsidy</i>					
	<i>2002</i>		<i>2003</i>		<i>2004</i>	
	<i>mld. lei</i>	<i>%</i>	<i>mld. lei</i>	<i>%</i>	<i>mld. lei</i>	<i>%</i>
<i>Banks with Romanian capital, of which:</i>	<i>12069,3</i>	<i>35,1</i>	<i>13477,0</i>	<i>33,7</i>	<i>15076,9</i>	<i>30,7</i>
<i>- with majority state capital</i>	<i>10273,0</i>	<i>29,9</i>	<i>10273,0</i>	<i>25,7</i>	<i>2348,3</i>	<i>4,8</i>
<i>- with private majority capital</i>	<i>1796,3</i>	<i>5,2</i>	<i>3204,0</i>	<i>8,0</i>	<i>12728,6</i>	<i>25,9</i>
<i>Banks with foreign capital</i>	<i>19879,1</i>	<i>57,8</i>	<i>23270,7</i>	<i>58,2</i>	<i>31080,9</i>	<i>63,2</i>
<i>I. Total commercial banks</i>	<i>31948,4</i>	<i>92,9</i>	<i>36747,7</i>	<i>91,9</i>	<i>46157,8</i>	<i>93,9</i>
<i>II. Branches of foreign banks</i>	<i>2422,2</i>	<i>7,1</i>	<i>3222,4</i>	<i>8,1</i>	<i>2980,7</i>	<i>6,1</i>
<i>Total banks with private majority capital, including foreign branches</i>	<i>24097,6</i>	<i>70,1</i>	<i>29697,1</i>	<i>74,3</i>	<i>46790,2</i>	<i>95,2</i>
<i>Total banks with foreign majority capital, including foreign branches</i>	<i>22301,3</i>	<i>64,9</i>	<i>26493,1</i>	<i>66,3</i>	<i>34061,6</i>	<i>69,3</i>
<i>Total bank system</i>	<i>34370,6</i>	<i>100,0</i>	<i>39970,1</i>	<i>100,0</i>	<i>49138,5</i>	<i>100</i>

Source: The Romanian National Bank, Annual Report, 2004

An important modification has been produced to the weight level hold by the assets of the banks with foreign capital or with foreign majority capital in the total of assets of the banking system, with an increase of 3,9 points per cent comparative to the year 2003, reaching a share of 62,1% at December 31, 2004.

Favorable evolutions have also been observed as regards the capitalization degree of the banking system (an increase of 12,5% at the end of 2004 comparative to 2003), as a main result of a consolidated position of some banks with foreign capital on the local banking market but also as a result of banks obligation to reach until May 31, 2004 a minimum level of the own funds of 370 milliards lei.

The realities from the countries with a functional market economy showed that the process of bank concentration, attained by fusion and acquisitions, is not only natural but necessary as well, having a sinuous evolution, being marked by twitches.

In Romania, this process is only in the beginning phase, having numerous barriers that have to be overpass. New ways of action are necessary, ways which should favor the consolidation of small banks with assets which aren't higher than 1% of the assets of our banking system. Therefore, we agree with the concept that, at a level of bank assets of almost 10 milliards USD, the present number of banks is too high, the best number being between 20 and 30. Nevertheless, we believe that we should enhance the assets and not to reduce the number of banks. On the other hand, the majority of those involved in the management of Romanian banks seem to be aware of the fact that, in the context of our integration in the European structures, the solution is represented by the concentration of resources by fusion or acquisitions or by the attraction of some investors with a highly financial potential.

The effects of the concentration on the bank activity are clear, especially during economic recession, the small banks being affected in the first place. They do not have the necessary resources to develop modern infrastructures which would allow them to offer integrated financial services in order to stimulate the personnel and the shareholder. Another important aspect is represented by the structure of the clients' portfolio, which cannot be optimized. The small banks, because they can not offer important credits, are obliged to address the small and middle enterprises, which are also exposed to the shocks in economy. The necessity of concentration is therefore vital especially in the moments of crises, no matter how it is built, by an increase of the social capital or by fusion.

Similar to the concentration tendency, the segmentation one, that is the restructuring of banking activity on larger levels, is a natural attendant of the modernization process. The existence, besides the commercial banks, of specialized banks will offer the premises of a greater bank management, and, in the end, of profitability.

In Romania, taking into consideration the dimension of bank market, all types of specialized banks which exist in the developed countries can not be established in a short period of time. Nevertheless, we consider that at least some of them should function, thus having a great impact on other key branches of our economy, like: agriculture, constructions and, especially, the external exchanges. We believe that in the following years the economic raise will have as support the export of goods and services and not the internal

consumption, and, from here, the necessity of a specialized bank in the finance of exterior commerce. The housing demand will also be higher and it will impose the creation of an institution which would stimulate the savings. The agriculture has to be based, in the context of our integration in The European Union, not on "budgetary subventions" but on a "reimbursed" banking finance. That is why it is imperative to form one or more specific banking institutions.

The positive trends concerning the development of the general economic environment, as well as the concentration of the actions of The National Bank of Romania on the qualitative process of surveillance, have put their mark on the evolution of the indicators which define the status of our banking system, indicators presented in table no 3.

Table 3 The evolution of the main economic - financial indicators and those of bank discretion

<i>Name of indicators</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
<i>Solvency report (> 12%)</i>	<i>17,9</i>	<i>23,8</i>	<i>28,8</i>	<i>24,8</i>	<i>21,2</i>	<i>18,79</i>
<i>Solvency report (>8%)</i>	<i>15,8</i>	<i>18,9</i>	<i>26,2</i>	<i>22,9</i>	<i>18,2</i>	
<i>The rate of personal capital (total asset)</i>	<i>7,5</i>	<i>8,6</i>	<i>12,1</i>	<i>11,6</i>	<i>10,9</i>	<i>17,9</i>
<i>Residual credits / Total portfolio credits</i>	<i>...</i>	<i>0,6</i>	<i>0,7</i>	<i>0,4</i>	<i>0,3</i>	<i>8,5</i>
<i>Total residual debts / Total asset</i>	<i>2,4</i>	<i>0,3</i>	<i>0,3</i>	<i>0,2</i>	<i>0,2</i>	<i>0,3</i>
<i>Total residual debts / Own capital</i>	<i>31,2</i>	<i>3,3</i>	<i>2,7</i>	<i>2,0</i>	<i>2,0</i>	<i>0,2</i>
<i>Rate of credit risk</i>	<i>35,4</i>	<i>3,8</i>	<i>2,5</i>	<i>1,1</i>	<i>3,4</i>	<i>2,9</i>
<i>General risk rate</i>	<i>40,7</i>	<i>38,7</i>	<i>39,7</i>	<i>42,9</i>	<i>50,5</i>	<i>47,5</i>
<i>ROA (profit / Total asset)</i>	<i>-1,5</i>	<i>1,5</i>	<i>3,1</i>	<i>2,6</i>	<i>2,2</i>	<i>2,1</i>
<i>ROE (profit / own capitals)</i>	<i>15,3</i>	<i>12,5</i>	<i>21,8</i>	<i>18,3</i>	<i>15,6</i>	<i>17,0</i>

Source: The National Bank of Romania, Annual Report, 2004

The increase of financial intermediation led to an increase of credit risk in the banking system, which was reflected in the growth of the general risk rate and of the credit risk rate as well as in the diminution of solvency rate (but this is maintained to a comfortable level, significantly outrunning the reference share accepted on the international plane). The dynamic evolution of the crediting activity did not imply a deterioration of the portfolio of credits quality; on the contrary, the share of the residual debts in the total of credits (net value) has been reduced with 0,11 points per cent comparative to the end of 2002, up to 0,32%. The banking system profitability was situated above the inflation rate in 2003, provided that the profit increased in nominal terms by 15,6%, its reduced dynamics comparative to that of 2002 (18,3%) being determined by: the reduction of

the distance between the rates of active interests and those of the passive interests to the operations with the non-banking and nongovernmental clients from 17,6 points per cent in December 2002 to 14,7 in December 2003; the implementation of the new regulation concerning the classification of credits that emphasized the banking effort for provisions; substructure investments made by the majority of banks.

The increase of the crediting activity was revealed in the aggregate volume of the financial result of 2003 (13290,5 milliards lei), superior to the one registered in the previous year (12498,1 milliards lei), the main source being the net interest incomes. Nevertheless, the profitability indicators (ROA and ROE) were situated on a scale of increasing values in the further period after having implemented the new regulation of credits classification and provisions (from 1,2% in January to 2,1% in December in ROA case and, from 8,4% to 17,0% in ROE case).

4. Conclusion

The favorable trends registered by the main indicators of banking system evaluation were pointed out by the representatives of The International Bank, The International Monetary Fund and The European Commission. According to these evaluations, the banking system presents a good capitalization, it has a raised liquidity and it is well supervised, the supervision authority possessing an appropriate administrative capacity, qualified personnel and a fine management. The banking system was considered resisting to the potential market and credit risks, the exposure to the currency and interest risk having a reduced level provided that banks balance their net currency position and the interest rate is variable. The dynamic of the crediting activity did not affect the solidity of the banking system, the prudential indicators – an increased rate of solvency (20%), a higher liquidity (more than 3), the level of residual credits (less than 1% of the credits portfolio of the banks) – indicating a considerable resistance to impacts. We believe that the positive trends of the economic-financial indicators and those of bank discretion have as support the favorable evolution of the following factors:

- the raise of the capitalization level as a result of the finalization, at the end of 2002, of the second level of increasing the minimum social capital of banks, as well as the consolidation of the financial position of the foreign shareholders for different banks. The significant presence of the private sector was felt at the level of capitalization of banking system, the share of this segment in the total of the capital reaching 74.3% [5] at the end of 2003;

- the expansion, especially in the last part of the analyzed interval, of the balance assets, accomplished especially in the area which deals with the customers. After many years, the structural dynamic of the asset enhances the change in attitude of the banks in the orientation of their resources and their placing on the credit market for a short period;

- the raise in the quality of managerial act. The raise during the last three years of the general risk rate shows the expansion of the crediting activity. But, this raise has been accompanied by a positive evolution of the bank capitalization, the personal funds of the banks assuring a level of solvability situated above the limits settled by the central bank for the well – capitalized banks. So, the expansion of the credit portfolio was not to the prejudice of its quality. Moreover, the credit risk has a positive trend, a level recorded at the end of the analyzed interval being in the segment of banks with a rating of 1;

- the diminution, especially in the last year of the analyzed period, of the distance between the active interest and the passive ones specific to the operations with non-banking clients and to the efficiency of alternative placing using the state titles and the deposits placed at the central bank. Correlated with an alert rhythm of raising the bank assets and the personal funds, this adjusting of distance led to an easy contraction of the capitalization indicators;

- the polarization, taking into account the rating, of the big banks, on its superior level. Although they were still in majority at the end of the analyzed period, the banks with rating 2 have decreased their share in the total bank asset in the favor of those with rating 1.

As a conclusion, by their level, the economic-financial indicators and those of bank discretion testify that the Romanian banks have made significant steps towards the criteria imposed by the European integration.

References

- [1] IONESCU, L.C. *The Banks and the Banking Operations*. The Economic Printing House, Bucharest, 1996;
- [2] LAZARESCU, V. *The Commercial Banks in the Market Economy in Romania*, Agora Printing House, Bacau, 1998;

- [3] PUIU, A. *Banking Strategies – one of the causes of the present crisis in the Romanian Economy*, The Economic Independence Printing House, 2000;
- [4] SAVOIU, V. *On the Way through The National Bank of Romania*, R.A. “B.N.R. press”, 1995;
- [5] The National Bank of Romania. Annual Report, 2004.

THE ROMANIAN BANKING SYSTEM

Valentin Hapenciuc

Iulian Condratov

Lucian Livadaru

“Ștefan cel Mare” University of Suceava
Faculty of Economics and Public Administration
Trade and Tourism Department
9, Universitatii Street
720225 Suceava
Romania

e-mail: hapivali@fim.usv.ro, great_ec@yahoo.com, liberisus@yahoo.com

telephone: +40 744 156 467, + 40 740 696 309, +40 743 561 556

Abstract

Romania has been selected among the 10 Central and Eastern European candidates for EU membership and is expected to join the Community in 2007. Romanian financial institutions have to face today adaptations and opportunities and banking business in the country seems fairly attractive to foreign banks. The paper highlights the rise and the development of banking in Romania and covers the period from 1865, when the first modern commercial bank was established to present days when the Romanian banking system will become a part of a larger EU banking structure.

Keywords: *Banking system, privatization, Romania*

1. Introduction

The banking system is of particular importance to the Romanian economy being a key factor in our future development. Romania's admittance into the EU structures, depends on a large extent on its capacity to produce a sustainable economic growth which must be backed up by a reliable banking system which is capable of answering back both to the internal and external influences. This work paper wants to underline that all the current strategies regarding the banking system aims at increasing its competitiveness and, at the same time, plans to eliminate all the obstacles which stand in front of Romania's integration.

2. The history of the Romanian banking system and its beginnings

The first modern commercial bank was established in the Romanian Principalities in 1865 under the name of The Bank of Romania. The bank was organized as a limited joint-stock company, with subscribed capital worth FF 25,000,000. The Bank of Romania was initially set up as an issuing and commercial bank by the English and French investors who governed the Banque Imperial Ottomane. Four years later, the Romanian Government revoked the Bank of Romania's monopoly of issue. Accordingly, this institution operated further as a private commercial bank until its liquidation in 1948 by the communist regime.

The establishment of a modern-type banking system, designed to replace money lenders and trade houses that had developed healthily before the mid of the 19th century, was a slow process until the setting up of the National Bank of Romania.

On April 17, 1880, Parliament voted and passed the foundation law of the first banking institution, which was to play a major part in the economic development of the country.

The new institution called also "The Bank of Banks" fully matches as functions and organization the similar institutions in the Western countries. Since its establishment and up to World War I, the National Bank played a major part in financing the banking system by means of discount credits.

The National Bank of Romania was established at the initiative of the Liberal Party in order to grant credits in high demand after the Independence

War (1877), and providing financial stability for the country. The National Bank of Romania was designed not only to play the role of state financing and note issuing, but also to perform purely commercial banking functions. In compliance with the provisions of the law governing its establishment, the new banking institution was a joint-stock company, with the Romanian government holding 1/3 of the capital stock (shareholders holding the remainder). These provisions precluded foreign shareholders from sharing the National Bank of Romania's capital, closely following the principle of domestic control over the national economy required by the liberals. In 1901, The National Bank of Romania became a private institution. Under the Liberal Party's control, the National Bank of Romania played a significant part in the foundation of the Romanian modern type banking system and contributed to the strengthening of the Romanian bourgeoisie economic position.

The economic progress that accompanied the consolidation of the Romanian state and the support provided by the National Bank of Romania accelerated the establishment of private commercial banks, especially during the period that preceded the outbreak of World War I. The number of commercial banks increased to 215 in 1914, from 3 banks existing in 1880. If the setting up of the National Bank of Romania and long-term credit institutions were done only with domestic capital, in turn, foreign capital would be involved substantially in the creation of the new private commercial banks. Accordingly, in 1914, German, Austrian, French, Belgian and English banking institutions held 40 percent of the Romanian commercial banks' capital.

On the eve of World War I, the Romanian banking industry was highly concentrated, being dominated by 9 leading commercial banks, called "the big Romanian banks". In 1913, these banks held 70 percent of the total commercial banks' resources, while 188 small and middle-sized banks held the remainder of the total resources. Taking into account the origin of the capital, the composition of the group of "the big Romanian banks" was the following: 4 banks with national capital (Banca Agricola, Banca Comertului from Craiova, Banca Romana de Scout, Banca Romaneasca), 4 banks with foreign capital (Banca Generala Romana, Banca de Credit Romanesc, Banca Comerciala Romana, Banca Romaniei), and one bank with foreign and domestic capital (Marmorosch Blank &Co. Bank).

After World War I, under national oriented policies promoted by the Liberal governments, the weight of the foreign capital in the banking system declined in relative terms. Despite this capital trend, the banks with foreign interests maintained significant positions in the banking system and were able

to better identify profitable investments than their Romanian-controlled competitors.

Significant for the spectacular boom of the Romanian banking system by then was the rise in the number of the joint stock banking companies from 215 in 1918 to 1122 in 1928.

The financial and banking system was well organized in those years, offering the favorable pre-requisites for obtaining on the eve of 1938 competitive economic indexes in general as well as in many specific fields, as compared with to the standards reached in the other European countries.

During 1931-1932, the banking sector felt the repercussions of the economic crisis due to its close links with the industry. Banks' supervision was almost nonexistent. This state of affairs contributed to the collapse of some large banks, but generally the banks with foreign interests withstood the shocks.

In order to strengthen the banking system, the Romanian Parliament passed "the Law on the organization and regulation of the banking commerce", on May 8, 1934. Under this law, The National Bank of Romania was deeply involved in drafting measures for recovering the banking system by liquidating non-viable credit institutions and merging institutions weakened by the crisis. Consequently, the number of banks was diminished from 893 in 1933, to 523 in 1937 and 246 in 1944.

After 1934, the state intervention in regulating the banking sector forced the foreign-controlled banks to comply with imposed requirements and to apply a policy in line with Romania's general interests.

Characteristic of the interbella activity of the National bank was its financial support for the country's economic rehabilitation, for the swift accumulation of capital, for the strengthening of domestic industry, for the unprecedented expansion of the financial market, the growth of Romanian exports and participate on in wide-scope international transactions.

Soon, after the communists took the power in Romania according to the Decree Law no. 197/1948, all the Romanian and foreign-controlled banks were liquidated, except for the National Bank of Romania, the National Company of Industrial Credit and the Savings Bank.

The 1934 banking law being abrogated, the remaining banks continued their activity under the provisions of the Commercial Code and their specific laws. In the years that followed, the Romanian banking system was organized as a mono-bank system, typical to a centralized economy. It is noteworthy that in the 70s, during a period of economic liberalization two foreign banks were allowed to establish branches in Romania: Manufacturers

Hanover Trust (the branch being now part of the Chase Manhattan Bank network), and Societe Generale.

3. The Romanian banking system nowadays

The actual Romanian banking system enjoys a two-tier structure, involving the National Bank of Romania (NBR) and the banks. This new banking system was introduced in December 1990, marking the first step of the banking reform process, when the NBR assumed the traditional central bank's functions and its previous commercial operations were transferred to the newly established the Romanian Commercial Bank.

The issuing of the Law on banking activities (33/1991) and the Law concerning the Statute of the National Bank of Romania (34/1991) represented the beginning of the organization of the banking system in accordance with the market economy principles.

The legal framework of the banking system was reshaped and improved in the first half of 1998, when three banking laws were enacted: the Banking Law (No. 58/1998), the Statute of the National Bank of Romania (No.101/1998) and the Law on Bankruptcy Proceedings for Banks (No. 83/1998). By the enactment of the new legislation, together with the Law on privatization of state-owned banks (no. 83/1997), the weaknesses of the former legislative framework were corrected in order to ensure a sound and stable banking system, to strengthen the independence of the NBR and its enforcement powers and to improve the exit mechanism for ailing banks.

The National Bank of Romania is aiming at full harmonization of the legal framework for banking activity with European Union regulations, in order to facilitate the European integration of Romania.

During the last decade, the main characteristics of the banking system have been concentration and segmentation. Despite the increasing number of banks over the recent years, there are four banks dominating the market, which account for approximately 60 percent of the banking sector's assets, more then 60 percent of the deposits and more then 60 percent of the paid- in capital at the end of June, 2000.

The former commercial banks have changed themselves and have become real commercial banks for the market economy. In 1990, the former commercial banks have been established as follows: Banca Comerciala Romana SA, Banca Romana de Comer Exterior SA, Banca Agricola SA, Banca Romana pentru Dezvoltare SA and many other new commercial banks have also been established, such as Banc Post SA (state capital), Mind Bank SA (private capital).

Until August 9th, 2005, the National Bank of Romania has authorized 39 banks, Romanian legal entities, to render banking services. (see Annex no. 1).

The NBR tries to stimulate, within the legal framework, the establishment of branches and subsidiaries of foreign banks, as they play an important role in developing the range of banking services and improving their quality.

There are different kinds of banks when considering capital that can apply for banking licenses issued by the NBR:

I. Romanian banks, of which:

a). fully or majority state-owned capital, out of which:

- fully state-owned capital (e.g. Savings Bank);
- majority state-owned capital (e.g. Romanian Commercial Bank);

b). fully or majority private capital, out of which:

- fully or majority domestic capital
- fully or majority foreign capital

II. Foreign banks branches, such as ING Bank, United Garanti Bank International, Banque Branco-Roumaine.

At the end of August 2005, there were 39 banks, Romanian legal entities, including 8 branches of major foreign banks. This number rose significantly from 7 banks in 1990.

3.1 The National Bank of Romania

In accordance with the Law No. 101/1998, the National Bank of Romania is a public institution, with legal personality, entitled to establish branches, subsidiaries and agencies. The main responsibilities of the NBR are the followings:

- to ensure the stability of the domestic currency with a view to maintaining price stability;
- to issue currency as legal tender in Romania;
- to design and implement the monetary, foreign exchange and credit policy;
- to participate on behalf of the State in external negotiations on financial, monetary and payment matters.

The National Bank of Romania is mainly engaged in the following activities:

- licensing commercial banks, both foreign and domestic, and monitoring their activities on a monthly basis;
- keeping the Romania's international reserves;
- elaborating the balance of payments;

- setting the level of reserve requirements of commercial banks, which in turn influences the liquidity of the financial system;
- establishing the foreign exchange policy of the State, setting exchange rates, licensing and supervising legal entities authorized to conduct foreign exchange transactions.

The National Bank of Romania is headed by a Board of Directors and its current management is entrusted by the Governor. The Board of Directors consists in the governor, the First Deputy Governor as Vice-Chairman, two Deputy Governors and five members. The members of the Board of Directors are appointed and replaced by Parliament on the recommendation of the Prime Minister.

On a permanent basis, the National Bank of Romania co-operates with the international Monetary Fund and specialized consultants provided by the World Bank, as well as with other organizations in developing policies and procedures governing the Bank's operations.

3.2 Banks - A Main Part of the Romanian Banking System

Under the provisions of the Romanian Banking Law, with subsequent amendments, a bank represents a credit institution authorized to perform mainly the activity of collecting funds from both legal and natural persons through deposits or negotiable instruments payable on demand or on maturity as well as that of granting credits.

The European Union countries utilize the concept "credit institution" in order to define the above activity. The credit institution represents an undertaking whose business is "to receive deposits or other repayable funds from public and to grant credits for its own account".

No entity is allowed to perform any banking business within the Romanian territory, without the National Bank of Romania's previous authorization. Banks, Romanian legal entities, as well as branches of foreign banks may perform, within the limit of the authorization granted, the following operations:

- Open accounts in RON and in foreign currencies;
- Receive demand, time and notice deposits;
- Loan agreements (grant short, medium and long term loans and credit lines in RON and in foreign currency), factoring operations and discounting of trade bills;
- Carry out banking operations in Romania and abroad;
- Issuance and management of the instruments of payment and credit;
- Payments and settlements;
- Financial leasing and funds transfers;

- Issuing guarantees and assuming commitments;
- Issue and operate credit cards;
- Buy and sell government securities;
- Transactions on their behalf or in their clients' account with: negotiable money instruments (cheques, bills of exchange, certificates of deposit), foreign currencies, financial derivatives, precious metals, securities;
 - Management of clients' portfolios;
 - Securities custody and management;
 - Renting of security safe boxes;
 - Financial, banking consulting and Electronic banking.

3.3 Privatization of the banking sector

Romanian commercial banks began their operations with relatively specialized portfolios, reflecting their pre-1989 concentration in particular economic sectors. However, this initial specialization has diminished as the banks competed with each other and new banks entered the market. A number of new banks with private Romanian or mixed capital have been licensed to begin operations. The privatization process of the major state-owned commercial banks started in 1998. Law on bank privatization (Law No. 83/1997) established the legal framework for the transfer of state-owned banks to the private sector and the improvement of their financial situation.

The privatization of the banking companies may be achieved in one of the following ways:

1. Increasing the share capital, through contribution of private capital in cash, on the basis of public offer or private investment;
2. Selling the stock administered by the Authority for State-Owned Equity Management and Privatization, only in cash, with full payment, towards: Romanian individuals; foreign individuals; Romanian legal persons with private majority capital; financial investment companies; foreign legal persons with private majority capital; a combination of the two methods described above.

The National Privatization Authority is the administrator of state equity in the banks' capital. A privatization commission is set up in the case of commercial companies in which the state is shareholder. The privatization commission shall supervise the privatization operations and ensure the observance of transparency, consistency and objectivity of the principles. The privatization of such companies shall be based on the valuation reports and feasibility studies drawn up by a specialized company in accordance with international standards.

In compliance with Law No. 83/1997, the process of bank's privatization in which the state is a shareholder carries on. In 1999, the

privatization of state-owned banks represented one of the key objectives of the structural adjustment program supported by the World Bank and the International Monetary Fund. In this respect, the privatization process of Romanian Development Bank and Banc Post was completed in the first semester of 1999. The majority interest (i.e. 51 percent) in case of Romanian Development Bank was sold to the French bank Societe Generale, while General Electric Capital Corporation and Banco Portugues de Investimento acquired the controlling interest (i.e. 45%) in Banc Post. In this way, private capital in the two banks accounts for 90 percent and 83 percent respectively.

Privatization of the Agricultural Bank ended with the sale, on April 12, 2001, of the state equity holding to the consortium made up of Raiffeisen Zentralbank Osterreich A.G. (93.13 percent) and the Romanian-American Enterprise Fund (5.7 percent). Referring to the stage of privatization process of Romanian Commercial Bank, the privatization strategy was approved in 2001 by the empowered institutions (National Authority for State-Owned Assets Management and Privatization, Ministry of Development and Prognosis, Ministry of Public Finance and the National Bank of Romania) and will be completed in the following years.

The privatization is beneficial for all parties involved, ensuring banking know-how and expertise transfer, introduction of new or improved banking products, improved efficiency for bank's assets, harmonization of bank's quality services with internationally recognized standards, banking network development included, a more efficient integration of the Romanian banking system into the international one, thereby facilitating access to world financial markets.

4. Recent developments and perspectives

During the previous years, The National Bank of Romania had the following objectives:

- Achievement of lasting macroeconomic stabilization together with the revitalization of the financial market for an efficient allocation of the resources, transparency of information, and achievement of economic equilibrium. The National Bank of Romania considers that the well functioning of a complete market system in Romania is a condition for a lasting economic growth.
- The foreign exchange market liberalization by allowing all the authorized banks to be dealers in transactions and via exchange rate liberalization.

Large foreign exchange purchases by the National Bank of Romania made in order to avoid nominal appreciation of national currency led to the increase of the foreign exchange reserves:

- The capital market experienced a large increase in trading on both levels of The Stock Exchange, and of RASDAQ. The main reason for the development of the capital market was the increase of the shares demanded from the non-resident corporate investors, bolstered also by the increasing number of listed companies.

- The monetary policy conducted by the National Bank of Romania aimed to ensure macroeconomic stabilization, specially the decrease of the inflationary effect of price liberalization, the restoring the central bank's credibility to regain the confidence in the national currency and, to achieve the remonetization of the economy.

The efficiency of the monetary policy was sustained by the following achievements:

a) Release of the monetary policy from the quasi-fiscal constraints consisting of directed and preferential credits;

b) Integration of the monetary policy in the macroeconomic policies;

c) Achieving of a healthy currency issue based on improving of the National Bank of Romania portfolio by increasing the net foreign assets and the foreign reserves;

d) Improvement in the transmission of the monetary policy measures by the liberalization and development of the financial markets, especially of the money market;

e) Achieving real-positive interest rates and maintaining those levels;

f) Improvement and completion of the legal framework for the regulation of the banking and central bank's activity by drafting of the Banking Act, the Bank Insolvency Act, Bank Privatization Act, and the National Bank of Romania Act.

In the next years, the National Bank of Romania will focus its efforts on carrying out a stable policy and a macroeconomic stability, as well as on correlating the macroeconomic policies with measures taken in the privatization and structural adjustment areas.

The orientation of the National Bank of Romania reflects also important performance concerning: a) Guiding the monetary policy towards price stability; b) Creation and development of financial markets; c) Carrying out the open account convertibility of the national currency; d) Increase the international reserves; e) Consolidating its formal and operational independence.

Concerning the monetary policies, the program of the National Bank of Romania is a part of the economic program of the Government. This program has as major objective to reduce the inflation rate and to achieve lasting macroeconomic stability. Other objectives of the program are: to improve the quality of the banking sector by supervision and regulation; to improve the banking information and payments system, by modernization of

the settlement and clearing system; harmonization of the payment system operational procedures with the new banking legislation; modernization and expansion of the services rendered by the banking information system.

The National Bank of Romania will pay a special attention to the developments in the Euro-area and will monitor the consequences of starting stage III of the Economic Monetary Union. As a central bank of a country candidate for the European Union (EU), the National Bank of Romania will strive both to carry on implementation of domestic reform and to ensure the legal, institutional and procedural harmonization with its correspondent entities in the EU.

The National Bank of Romania will become a member of European System of Central Banks (ESCB) at the moment of accession to the EU. Romania will be in the position to adopt Euro only after it has complied with the convergence criteria stated in the Treaty. The task of NBR will differ from one stage to another. There are to be no essential changes in the NBR activity since the central bank will be an ESCB member with derogation during the period between accession to EU and acceptance to the Euro area.

Consequently, the NBR governor will not attend the meeting of Governing Council, but only the General Council, which has a consultative role. The NBR will keep on maintaining the price stability and will have to look the currency exchange policy as an issue of general concern. Therefore, Romania will have to participate to the exchange rate mechanism of EU - MCE II. According to the circumstances, this participation may take place immediately after accession or later.

National Bank of Romania will become a full member of ESCB only after Euro will replace RON. So NBR will no longer define the monetary policy, as our central bank will implement the unique monetary policy established by the Governing Council. But the NBR governor will be a member of this Council, thus being part of the decision-making process related to the monetary policy. NBR will have the same task of prudential supervision, issuing coins, having and establishing international relations with different institutions and effecting any financial operations for various entities. NBR will also manage the official reserves after the transfer of share-quota to the European Central Bank.

5. Conclusion

The banking system in Romania after 1989:

- the new banking system started on December 1, 1990

- two levels: NBR as a central bank and the commercial banks
- the Law on banking activities (33/1991) and the Law concerning the Statute of the NBR (34/1991) according to the market economy principles
- the former commercial banks changed and new commercial banks were established
- the new laws were introduced in 1998: 58/1998 and 101/1998
- new regulations of the banking system: Law 375/2002 and Law 101/1998 was modified

References

- [1] BOWDEN E. V. *Money, Banking and the Financial System*, St. Paul : West Publishing Co., cop. 1989
- [2] DOLTU C., *The Evolution of the banking system in Romania*, The Romanian Center of Economic Policies, www.cerpe.ro
- [3] GEORGESCU-GOLOSIOIU L., *Business of Bnaking*, Editura ASE, 2002
- [4] SAVOIU V., *Banca Centrala si sistemele de plati de interes national*, Ed. Enciclopedica, 1998
- [5] The National Bank of Romania, www.bnr.ro

BANKS OPERATING IN ROMANIA IN AUGUST, 2005

No	Bank	Head Office	Licencing date
1.	Anglo-Romanian Bank Limited Anglia Londra SUCURSALA BUCURESTI	Bucuresti, Bd. Carol I nr.34-36, sector 2	27.12.1979
2.	MISR Romanian Bank SA Cairo, sucursala Bucuresti	Bucuresti, Bd. Unirii nr.66 bl. K 3 sector 3	06.06.1987
3.	Banca pentru Mica Industrie si Libera Initiativa - MINDBANK S.A.	Bucuresti, Calea Grivitei nr.24, Sector 1	10.07.1990
4.	BRD - Groupe Societe Generale S.A.	Bucuresti, bd. Ion Mihalache nr.1-7, sector 1	01.12.1990
5.	Banca Comerciala Romana S.A.	Bucuresti, Bd.Regina Elisabeta nr.5, sector 3	01.12.1990
6.	RAIFFEISEN BANK SA	Bucuresti, Piata Charles de Gaulle nr.15, et.4,5,6,7 si 8, sector 1	01.12.1990
7.	Banca Comerciala "Ion Tiriac" SA	Bucuresti, str.Nerva Traian nr.3, bl.M101, sector 3	20.03.1991
8.	EUROM BANK S.A.	Bucuresti, B-dul Aviatorilor nr.45, sector 1	10.04.1991
9.	Bancpost S.A.	Bucuresti, Calea Vitan nr.6, 6A, Tronson B si C, et.3-7, sector 3, bd.Libertatii nr.18, bl. 104, bd Libertatii nr.20, bl.103, sector 5	26.11.1991
10.	Banca de Export Import a Romaniei EXIMBANK S.A.	Bucuresti, Spl. Independentei nr.15, sector 5	14.04.1992
11.	Banca Romaneasca Membra a Grupului National Bank of Greece S.A.	Bucuresti, bd.Unirii nr.35, bl.A3, sector 3	15.09.1993
12.	FINANSBANK (ROMANIA) S.A.	Bucuresti, Splaiul Unirii nr.12, bl.B6 sector 4	10.12.1993
13.	Banca Transilvania S.A.	Cluj-Napoca, str. George Baritiu nr.8	28.01.1994
14.	ROMEXTERRA Bank S.A.	Targu Mures, Bdul 1 Decembrie 1918 nr.93	02.03.1994
15.	ALPHA BANK ROMANIA S.A.	Bucuresti, Calea Dorobantilor 237 B, sector1	02.03.1994
16.	ING Bank N.V., Amsterdam - sucursala	Bucuresti, sos.Kiseleff nr.11-13, sector 1	22.06.1994

Bucuresti		
17. PIRAEUS BANK ROMANIA S.A.	Bucuresti, bd.Carol I nr.34-36, et. VI, sector 2	03.05.1995
18. ABN AMRO Bank (Romania) S.A.	Bucuresti, Piata Montreal nr.10, WTCB unit.2.23, sector 1	26.06.1995
19. OTP BANK ROMANIA S.A.	Bucuresti, str.Buzesti nr.66-68, sector 1	20.12.1995
20. Citibank Romania S.A.	Bucuresti, bd. Iancu de Hunedoara nr. 8, sector 1	26.06.1996
21. BANCA COMERCIALA SANPAOLO IMI BANK ROMANIA S.A.	Arad, str.Revolutiei nr.88	26.06.1996
22. Emporiki Bank - Romania SA	Bucuresti, str.Berzei nr.19, sector 1	25.07.1996
23. Banca Italo-Romena SpA Italia Treviso - sucursala Bucuresti	Bucuresti, Bd. Dimitrie Cantemir nr.1, bl.B2, sc.2, parter si mezanin, sector 4	13.11.1996
24. NOVA BANK S.A.	Bucuresti, b-dul Dimitrie Cantemir nr.2, bl.P3, tronson II, sector 4	25.11.1996
25. LIBRA BANK S.A.	Bucuresti, str. dr. Grigore Mora nr.11, sector 1	25.11.1996
26. Banca Daewoo (Romania) S.A.	Bucuresti, Bd. Unirii nr.55, bl.E4a, Tronson 1, sector 3	22.01.1997
27. UniCredit Romania S.A.	Bucuresti, Splaiul Unirii nr.16, sector 4	25.06.1997
28. HVB Bank Romania SA	Bucuresti, Piata Charles de Gaulle nr.15, parter, etaj 1, 2 si 3 , sector 1	13.04.1998
29. GarantiBank International NV - sucursala Romania	Bucuresti, str.Paris nr.30, sector 1	13.04.1998
30. ROMANIAN INTERNATIONAL BANK S.A.	Bucuresti, bd.Unirii nr.68, bl. K2, sector 3	13.04.1998
31. EGNATIA BANK (ROMANIA) S.A.	Bucuresti, str. General Constantin Budisteanu nr.28C, P+1, sector 1	17.07.1998
32. Banca Comerciala CARPATICA S.A.	Sibiu, str. Autogarii nr.1	15.07.1999
33. Casa de Economii si Consemnatiuni C.E.C. S.A.	Bucuresti, Calea Victoriei nr.13, sector 3	17.09.1999
34. VOLKSBANK ROMANIA S.A.	Bucuresti, sos. Mihai Bravu nr.171, sector 2	10.04.2000
35. Banca di Roma SpA. Italia Sucursala Bucuresti	Bucuresti, str. Dr. Staicovici nr. 75, sector 5	07.11.2000
36. ProCredit Bank S.A.	Bucuresti, str.Buzesti nr.62-64, et.1 si et.2, sector 1	20.05.2002

37. Raiffeisen Banca pentru Locuinte SA	Bucuresti, str. Nicolae Caramfil nr.79, sector 1	31.05.2004
38. PORSCHE BANK ROMANIA S.A.	Voluntari, sos.Pipera-Tunari nr.2, cladirea PORSCHE, parter, etaj 1 si 2, judetul Ilfov	27.09.2004
39. HVB BANCA PENTRU LOCUINTE S.A.	Bucuresti, str.Dr.Grigore Mora nr.37, sector 1	13.07.2005

Source: www.bnro.ro

EMPLOYMENT SITUATION IN TURKISH BANKING SECTOR AFTER THE CRISIS

Mehmet Şahin

Canakkale Onsekiz Mart University,
Biga Faculty of Economics and Administrative Sciences,
Public Finance Department
17200 Biga, ÇANAKKALE / TURKEY
Tel:0286 335 87 38
e-mail: mehmetshahin@comu.edu.tr

Gürol Özcüre

Ondokuz Mayıs University,
Ünye Faculty of Economics and Administrative Sciences
Economics Department
Devlet Sahil Yolu Üzeri, Gölevi Mevkii, 52400 Ünye,
ORDU / TURKEY
Tel:0452 323 82 55
e-mail: gurolo@omu.edu.tr

Abstract

When banking sector crash occurs during the financial crisis, losers are not only the customers, owners of the companies or governments...etc., the employees of the banks are also losing. In the period between the February 2001 crisis and August of the same year, and for a month following the attacks on September 11, till today, more than 50 thousand bank staff lost their job in Turkey. Bank number decreased from 81 to 48 and employment in Turkish banking sector decreased from 174,442 in 1999 to 124,030 until 2004. Bank number is decreased 48 in 2004 due to closures of banks or mergers and takeover. Employment is increased to 129,887 by May 2005. The number of banks operating in the banking system was 48 in January-June 2005. Of which, 35 were commercial banks, 13 were non-depository banks. This process was very painful for the jobless bank staff and for their family members. The aim of this study is to discover the Turkish bank staffs' current situation and to focus on unemployment problem in Turkish banking sector.

Keywords: Banking Sector, Crises, Employment, Turkey

1. Introduction

This paper aims to analyze the Turkish bank staffs' current situation and focuses on unemployment problem during the 2001 financial crisis in Turkish banking sector. In order to achieve this aim, firstly, the 2001 financial crisis general outlook and Turkish labour market situation during the crisis should be analyzed. This is the subject matter of second section and third section. Then, employment situation in Turkish banking sector should be analyzed in fourth section. Later, governance of privatization process and policies related with the employees of the closed banks should be taken into consideration in fifth section. Lastly, we added some conclusion to the paper in sixth section.

In this study we tried to assess the initial socio-economic impact of the 2001 crisis, with particular emphasis on the unemployment problem of bank staff. This covers a wide range of issues comprising labor market indicators such as unemployment in Turkish banking and decline in real wages of employed bank staff.

The study is based on a qualitative assessment and adopts a before and after methodology of comparing the situation before the crisis with the situation afterwards. Evidence of the effects of economic crises mixed. There are claims that the effects of the earlier 1994 crisis were still felt as late as 1998, with large foreign trade and public sector deficits and high rate of inflation.

Furthermore, at the top of list of structural factors are heavy demographic pressures and the labor market dominated by agriculture and large urban informal sector which is characterized by very large inter-sectoral and interregional productivity differentials and a slow pace of employment creation.

2. The 2001 Financial Crisis General Outlook

The 2001 crisis was the worst economic crisis in the Turkish nation's republican area since 1923 which resulted in a 7,5 percent decline in the economy.¹

In January 2000, with the aim of eliminating high and chronic inflation, the Turkish government launched a stabilization program with the support of the International Monetary Fund (IMF). The key to the disinflation

¹ H. Kaan NAZLI, Banking on Turkey, The National Interest, Vinter 2004/05, p. 114.

program was the introduction of a new exchange rate-based stabilization (ERBS), characterized by a pre-announced exchange rate and a built-in exit strategy, which envisaged a gradual and smooth transition to a flexible exchange rate. The program entailed tight monetary and fiscal policy as well as the implementation of structural reforms. Of all the structural reforms, the most important was related to the restructuring of the banking system. The timing of which as will be discussed had some important consequences for the November crisis.²

The imported question is that, what caused to the November 2000 and February 2001 financial crises. We can describe four different causes related with:

- Turkey initiated an extensive disinflation program, the aim of this program was to decrease the inflation rate to a single digit by the end of 2002. It relied exclusively on a nominally pegged (anchored) exchange rate system. But, introduction of a reliable atmosphere of exchange rate program was not achieved,
- Uneconomic behavior of Turkish banks without a smooth auditing system,
- Structural weakness of the 2000 disinflation program,
- Short-term deposit accounts of banks and huge amount of debts, taken as syndication credits which means foreign capital and this capital movements depends on the reliable financial markets.

Generally, banking crises comes together with the other type of economic crises in the emerging market countries. Shortly, the weak banking system caused economic crisis of Turkey in 2001.³

Colombia, Peru and Uruguay in 1982, Turkey in 1994, 2000 and 2001 faced with exchange rate crisis caused banking and stock exchange crisis. Argentina and Chile in 1980, Mexico and Venezuela faced with banking crisis caused exchange rate crisis and public finance crisis. Scandinavian countries in 1990s, Mexico in 1994 and 1995 and lastly Asean countries like Taiwan, Malaysia, Indonesia and South Korea in 1997 both the banking crisis, exchange rate crisis and capital market crisis came together at the same time.

² Hakan TUNC, The Lost Gamble: The 2000 And 2001 Turkish Financial Crises in Comparative Perspective, *Turkish Studies*, Summer 2003, Vol. 4 Issue 2, p. 31.

³ Aslan EREN, Bora SÜSLÜ, Finansal Kriz Teorileri Işığında Türkiyede Yaşanan Krizlerin Genel bir Değerlendirmesi, *Yeni Türkiye*, Sayı:41, Yıl:7, Eylül-Ekim 2001, ss. 662-674. <http://www.econturk.org/Turkiyeekonomisi/krz.rtf>, 07.10.2005.

As below Table 1 shows us that financial crises occurs both in developed countries and emerging markets countries. But, there are more economic crises in emerging market countries than developed countries such as exchange rate crises of currency collapses and banking crises. Also, crises may occur as exchange rate crises and banking crises together. Average recovery periods are also higher in emerging market countries and Gross Domestic Products (GDP) losses are big.

Table1: Financial Crises and Impact of The World Economy

	<i>Number of the Crisis</i>	<i>Average Recovery Period (years)</i>	<i>GDP Losses per Crisis (%)</i>	<i>Coused GDP Lost Crisis (%)</i>
Exchange rate crises	158	1,6	4,3	61
• Developed Countries	42	1,9	3,1	55
• Emerging Markets	116	1,5	4,8	64
Currency Collapses	55	2,0	7,1	71
• Developed Countries	13	2,1	5,0	62
• Emerging Markets	42	1,9	7,9	74
Banking Crises	54	3,1	11,6	82
• Developed Countries	12	4,1	10,2	67
• Emerging Markets	42	2,8	12,1	86
Situation of Exchange rate crises and Banking Crises happened together	32	3,2	14,4	78
• Developed Countries	6	5,8	17,6	100
• Emerging Markets	26	2,6	13,6	73
<i>Source: Mehmet TÜRK, Bankacılık Krizleri ve Bankacılık Sistemindeki Değişimler, http://www.gazetekeyfi.com/gazetekeyfi/koseyazilari/bankacilikkrizleri.html , 10.10.2005.</i>				

The crisis in November 2000 and February 2001 aggravated the problems that some of the banks in Turkey were already facing. At the end tenth number of commercial banks taken over by Savings Deposit Insurance Fund (SDIF). Foreign and domestic investors pulled out enormous sums of money from the Turkish financial market within a matter of days. This rush to withdraw funds came about nearly a year after Turkey introduced a

disinflation program predicated on an ERBS which was designed and supported by the IMF.

The Turkish government weathered the crisis in November with the financial support of the IMF and was able to hold on to the exchange rate peg. Three months later, however, turmoil in the market forced the government to abandon the peg. In the months that followed, the currency collapsed, unemployment soared, and Turkey faced the worst economic contraction it had seen in decades. In the case of the November crisis, panic was caused by the policies of the newly created banking supervision agency and the subsequent liquidity problems of a mid-sized bank. In February, it was the prime minister's statement that Turkey was in the midst of a "political crisis" following his disagreement with the president that triggered financial panic.

Following the demise of the exchange rate-based disinflation program, the newly appointed Finance Minister in Turkish Government Cabinet, Kemal Derviş (former vice president of the World Bank) submitted a new letter of intent to the IMF. On May 15, Derviş announced the invigoration of a new stabilization effort under the guidance of a program entitled "Turkey's Transition Program: Strengthening the Turkish Economy".

The new program would be the continuation of the previous disinflation program and would be backed by a series of "structural reforms" aimed at strengthening the banking system and at transforming the "old ways of economic policy making". However, the September 11 terrorist attack undermined the implementation of this new program, affecting investors' perceptions adversely. The Turkish government requested, in turn, a new three-year, stand-by arrangement for offsetting the detrimental effects of the external shock.

The IMF accepted the new letter of intent dated January 18, 2002, by providing a considerable amount of financial support. The last two stand-by arrangements should clearly be regarded as the continuation of the disinflation program launched at the end of 1999, even though they were implemented after its failure. IMF offered \$7.5 billion of new loans (and \$10.4 billion overall) for Turkey; Discussion of talks between Turkey and the European Union regarding Turkey's membership in the Union; role of poor regulation of Turkish banks on the country's unstable economy.

The main framework of the program itself, as well as the crisis episode, has been a source of debate since its very beginning. In particular, it was alleged by the former deputy managing director of the Fund, Stanley Fischer, that the difficulties in Turkey relate more to the banking sector and to the deterioration of macroeconomic fundamentals rather than any errors in

program design. In particular, according to Fischer, The recent difficulties in Turkey relate more to banking sector problems, and the failure to undertake corrective fiscal measures when the current account widened.⁴

The main reason for the financial crisis in February 2001 was the number of instances of malpractice in the banking sector, which collectively brought about a major liquidity crunch. The state intervened to take over a clutch of collapsed banks and poured millions of dollars into saving a corrupted banking system. One of the outcomes of all that, and one stressed by the IMF, was the establishment of a 'show and tell' system under which banks were obliged to be audited and have the size of their particular credit holes measured by outside experts. What this produced was a surprisingly healthy picture of the surviving banks.⁵

The combined effects of September 11th and sluggish growth have underlined or accelerated job trends that were already under way. Employment in finance soars and plummets with the markets.⁶

3. The Turkish Labor Market During The 2001 Crisis

The adverse production trends had the most significant impact on the labor market. A distinctive feature of the 2001 crisis was the mass redundancy of labor. Reductions in the working week and laying of workers temporarily with or without pay was the common practice. The severity of the 2001 crisis was such that a large number of workers lost their jobs, especially during the first few months of the crisis. This was the combined result of firms under financial strain either reducing their workforce or going out of business altogether. The evidence on the number of redundancies is rather patchy, with estimates from different sources varying by a wide margin. Detailed information on the profile of employees made redundant during the crisis in particular their distribution by age, gender, and labor market status is not available from official sources.

According to Ministry of Labor data published in February 2002, just one year after the emergence of the crisis, 1,567,000 persons who were unemployed, 390,000 were made redundant during the year. At the other extreme, another estimate covering the two years until August 2002 put the

⁴ Ahmet ERTUĞRUL, Erineç YELDAN, On the Structural Weaknesses of the post-1999 Turkish Disinflation Program. *Turkish Studies*, Summer2003, Vol. 4 Issue 2, pp.53-54.

⁵ Jon GORVETT, There may be trouble ahead, *Middle East*, Jan2003, Issue 330, p. 30.

⁶ *Economist*, What September 11th did, and what it didn't, 2/19/2005, Vol. 374 Issue 8414, Special section pp. 7-10.

total number of enterprises going out of business at 600,000 and the number of workers who lost their jobs as high as 2.3 million. According to figures given by a trade union, Seluloz-iş, for the largest three provinces (Istanbul, Ankara, and Izmir), in the first few months of the crisis until May, a total of 1,414 enterprises went out of business, resulting in 42,000 workers losing their jobs, with the automotive and machinery sectors hit particularly hard.

Estimates for the banking sector alone put the number of workers fired at around 50,000. In mass media, a sector in which labor-shedding reached unprecedented levels by Turkish standards, around 5,000 workers lost their jobs during 2001. Engineers and architects, with nearly 50,000 in their ranks made redundant, represent another major category of workers hardest hit by the crisis.⁷

A survey conducted by the research team of one of the major opposition parties, the Republican People's Party (RPP) indicates that 50 percent of these were single, 75 percent male, 25 percent university graduates, 40 percent high school graduates, and a massive 96 percent working in the private sector at the time, mostly in textiles, banking, and construction.

As expected, in the face of the increasing financial difficulties of firms and severely falling domestic demand, the severe contraction in production led apart from labor shedding to a virtual halt in recruiting in the private sector. A sharp drop in job openings in the public sector aggravated this. The affect of the crisis on employment, though, was by no means uniform across different production activities. Construction was most severely affected, with employment declining by a massive 18.3 percent during 2001. In the manufacturing sector, for which we have more detailed information, the index of employment (1997 = 100) declined sharply from 89.1 in 2000 to 81.6 in 2001. The RPP survey results, indicating that 23 percent of the workers made redundant during the crisis were replaced by new recruits, prove the same point.⁸

Similar to the 1994 crisis, public sector employment served as an instrument of crisis management. The public sector, whose role in employment creation had been in decline due to the process of privatization and trends towards small government, also cut back its recruitment. This probably hit recent university graduates most severely. On the other hand,

⁷ Fikret ŞENSES. Economic Crisis as an Instigator of Distributional Conflict: The Turkish Case in 2001, *Turkish Studies*, Summer2003, Vol. 4 Issue 2, p. 99.

⁸ The Republican Peoples Party (RPP)' announced in May 2002 on people who became unemployed as a result of the crisis. Prepared by Science' Management and Culture Platform of the RPP.

with almost perfect job security in the public sector, it was perhaps not surprising to see that this sector did not contribute to the level of unemployment during the crisis. The large number of applicants for public sector jobs, though, indicated greatly reduced job opportunities during the crisis.

The data given by the Turkish Employment Service, the number of applicants and the number of those registered as actually unemployed dropped during 2001. However, the Household Labor Force Survey results indicate that the number of unemployed persons increased considerably, from 1,455,000 to 1,892,000 during the same period.

Based on the Household Labor Force Survey results, the rate of unemployment increased from 6.3 percent in the last quarter of 2000 to 10.6 percent in the corresponding period in 2001, with the rate increasing further to 11.8 percent in the first quarter of 2002. The rise in unemployment was accompanied by a change in the profile of the unemployed, with the share of young and educated persons increasing sharply.

The effect of the crisis may not, however, be fully reflected in the unemployment rate for at least two reasons. First, some of those who lost their jobs, especially white collar female workers, might have deemed their prospects of re-employment to be rather slim and dropped out of the labor force altogether, joining the ranks of the other discouraged workers. Second, since persons who worked even one hour during the week before the survey was conducted were considered as employed, the unemployment rate does not capture the full extent of labor market slack. One would assume that these trends in the labor market might also have swollen the size of the informal sector. However, the share of selfemployed persons and unpaid family workers in total employment which may be taken as an indicator of the size of the informal sector increased only slightly, from 45.1 percent in 2000 to 45.8 percent in 2001.

As in previous crises, a major effect of the 2001 crisis on the labor market was a sharp drop in real wages. During the 1994 crisis, the real wages and salaries fell in both the public and private sectors to such an extent that it took several years to revert back to the pre-crisis levels in the private sector and even longer in the public sector. The rate of decline in real wages in 2001 was also very large, reaching an average of 14.4 percent in the manufacturing sector

The effect of the crisis on the working population was by no means confined to those groups discussed above. Although not systematically documented, there were reports of deteriorating working conditions for workers facing threats of redundancy, including longer working hours

without pay, reductions in money wages, delays in the payment of wages, and offers to give holidays earlier than usual. In addition, employers encouraged early retirement and resignation. Workers were probably tempted to succumb to these propositions for fear of losing their severance pay should the firm go bankrupt. The RPP survey showed that only 42

percent of workers made redundant during the crisis could receive their severance pay, and there were reports that many of those who could receive it had payments dispersed over time thereby eroding their real value severely due to high inflation.⁹

In the most recent crisis, in 2001, GDP plummeted by 7,5 %. In February that year the lira was devalued by about 40% in a week and short-term interest rates briefly touched an annual rate of 7,500%. The official rate of unemployment 10% is widely acknowledged to be unrealistically low. Due to there are considerable underemployment in agricultural sector.

Unemployment seems destined to get worse before it gets better. 700,000 new jobs need to be found every year to keep the unemployment level constant. That number is set to rise as the working population continues to grow. If the government meets its target of 5% growth for each of the next three years, it will create 1.65m jobs over that period, just enough to mop up the increase in the working population. But the labour force could be swelled further by large numbers of workers coming off the land as Turkey invests in its agricultural sector and increases productivity. Agriculture currently accounts for 33.2% of all jobs but only 13.4% of GDP. If the workforce was cut to match the sector's contribution to the economy, 4.4m jobs would have to be found elsewhere.

Some Europeans have nightmares about hordes of unemployed Turks roaming freely across the European Union (The EU) and undercutting native workers' pay. But in reality there is little evidence that immigration harms the natives' job opportunities. Rather, EU countries should be welcoming young Turkish workers, especially where populations are declining. Those workers will help to make sclerotic economies more flexible and keep up contributions to state pay-as-you-go pension schemes.¹⁰

⁹ ŞENSES, F. Economic Crisis as an Instigator of Distributional Conflict: The Turkish Case in 2001, *Turkish Studies*, Summer2003, Vol. 4 Issue 2, p. 102.

¹⁰ *Economist*, A promising start, 3/19/2005, Vol. 374, Issue 8418.

4. Employment Situation in The Turkish Banking System During The Crisis

The stabilization program was miss-managed and the economy moved to the brink of collapse in November 2000. Interest rates on bonds, which quadrupled in that period, caused severe damage, especially to banks that invested heavily in T-Bills and Government Bonds. Three banks, including the fifth largest private commercial bank, Demir, were taken over by the BRSA and placed under the administration of the SDIF in the final quarter of 2000. Thus, the number of private commercial banks declined to 28 from 31 throughout the year. Then there came official announcements to the effect that unhealthy banks were to be removed from the system. Tension was gradually eased and hopes appeared set to rise again.

Eight more banks were taken over in 2001. Finally all banks confronting direct injury were eliminated from the system. Due to certain mergers and sell-offs, the decrease in the number of private commercial banks was limited to 6 banks.

Some banks such as Pamukbank found themselves in deep mud. The BRSA ultimately took Pamuk over in mid-June. Those takeovers and mergers consequently pulled down the number of banks (including development & investment, state and foreign) in the system to 53 in 2003, from an all-time high of 81 in 1999. The number of mergers and acquisitions increased in 2001 and 2002.

The major protagonist of this era was the SDIF. Six of the taken over banks were merged under Sumerbank and sold to Oyak, Bankekspres was acquired by Tekfenbank, Demir was sold to HSBC and Sitebank was transferred to Novabank. Interbank, Esbank and Etibank, which were merged under Eti and placed on sale, failed to attract any bids, leading to its banking license being revoked. Toprak and EGS banks are merged into Bayindirbank, which is the BRSA's asset management body.

It was not just the SDIF banks that underwent mergers. Those conglomerates having more than one bank started private commercial bank mergers. Dogus Group triggered the process via merging Korfezbank into Ottoman Bank, and thereafter the two into Garanti Bank. Cukurova Group made an unsuccessful attempt to locate Pamukbank inside Yapi Kredi, as the operation was rejected by the BRSA to protect Yapi Kredi's shareholders. Another merger came from two development and investment banks with identical shareholder structures. Sinai Yatirim Bank was merged under TSKB

at the end of 2002. And Finansbank's acquisition of its little sister Fibank in 2003.¹¹

The country's "big four" Garanti Bank, Is Bank, Yapi Kredi Bank and Ak Bank were also rumoured to be in negotiations with foreign interests. Firstly, HSBC moved in to buy Demirbank. One of Turkey's largest holding companies Dogus owned one of the "Big Four", Garanti, plus two other smaller banks, the Ottoman Bank and Korfez Bank merged, then joined with Garanti bank. Also, Yapi Kredi and Pamukbank, both owned by the Cukorova Group, tried also merge. But the result was not successful. However, mergers between banks that are not part of the same group seem less likely.¹²

Turkey's banking regulator assumed control of two of the family's banks, named, Imar Bank and Ada Bank, alleging Uzan and his sons had misappropriated \$5.9 billion in 2004.¹³

Since 2001 February's financial crunch, Turkey's beleaguered banking system had been gone through some dramatic and rapid changes. With the pressure full on for the country's financial institutions to do some serious redeploying, particularly as they had been widely singled out as the major factor in the country's recent economic crisis, Turkey's banks were in the market for serious foreign buy outs, partnerships and mergers.

Since 1980s the Turkish banking sector experienced a significant expansion and development in the number of banks, employment in the sector, diversification of services and the technological infrastructure. The number of banks increased from 43 in 1980 to 66 in 1990 and to 79 by the end of 2000. 5 banks under the management of the Saving Deposit Insurance Fund (SDIF) were merged under Sumerbank bringing the number of banks to 74 by mid-May 2001. Of these 74 banks, 56 banks are deposit money banks and 18 are investment and development banks. Of the 56 deposit money banks, 4 are state banks, 26 are private domestic banks, 18 are private foreign banks and 8 are under the SDIF. Total employment in the banking sector has increased from 125 thousand in 1980 to 154,000 in 1990 and to 170,000 in

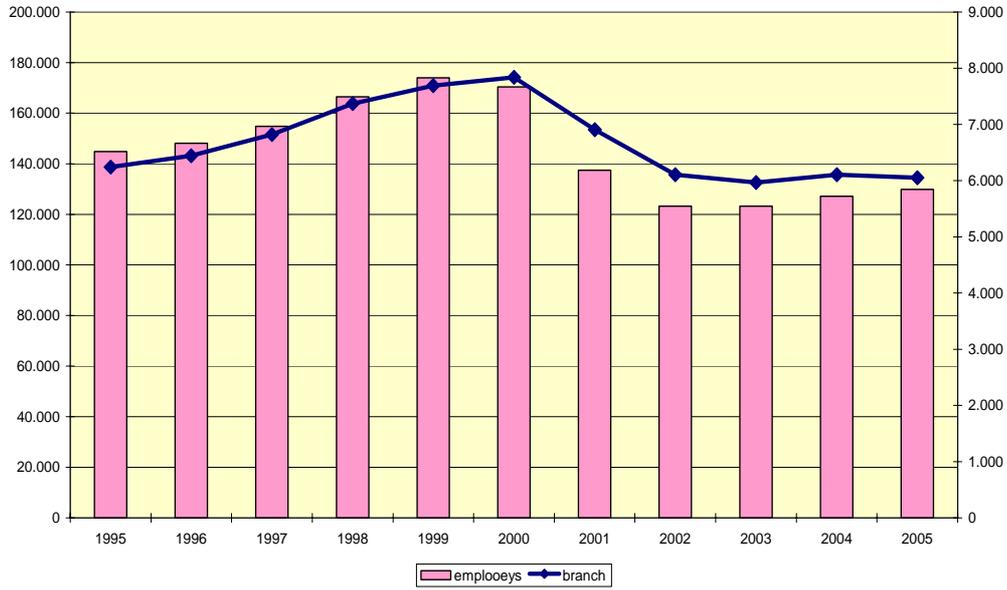
¹¹ M., YUKSEL, Turkish Banking Sector A Glimpse Through the Parting Clouds, Ak Yatirim, June 16, 2003, Istanbul. [http://www.geocities.com/meterello/GLIMPSE.pdf#search=' Turkish%20Banking.](http://www.geocities.com/meterello/GLIMPSE.pdf#search='Turkish%20Banking)

¹² Jon, GORVETT, Turkish Banks Sell Off, *Middle East*, Sep2001, Issue 315.

¹³ P., KLEBNIKOV, M., SWIBEL, Gilded Cage, *Forbes*, 3/15/2004, Vol. 173, Issue 5.

2000. Banking sector employment has been contracting in the aftermath of the November 2000 and February 2001 crises.¹⁴

Graph 1: The Number of Emplooyes and Branches in Turkish Banking Sector (1995-2005)

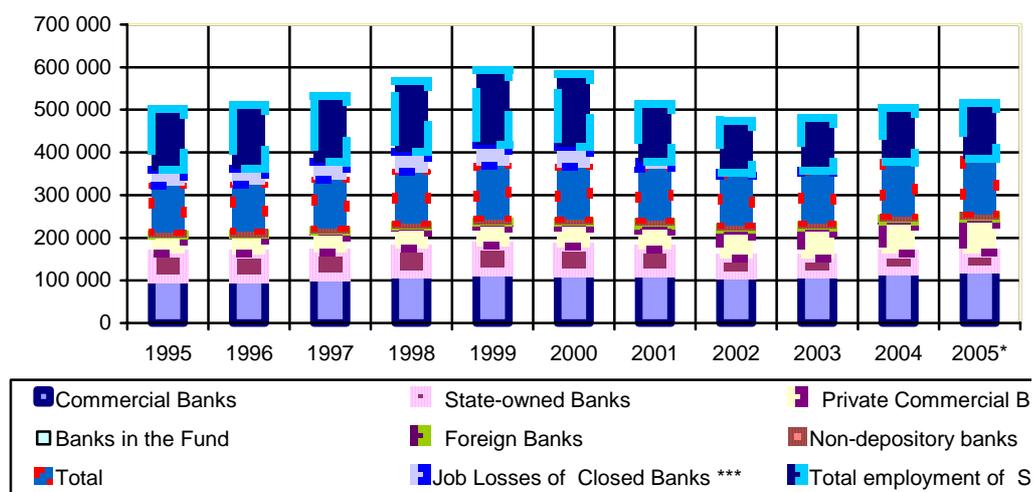


Source: Banks Association of Turkey (BAT) www.tbb.org.tr

Considering the education of bank employees, 2 percent of total employees were elementary-school graduates, 35 percent high-school graduates, 60 percent university graduates, while 3 percent have post-graduate degrees.

¹⁴ Banking Regulation And Supervision Agency (BRSA), Towards A Sound Turkish BankingSector, http://www.bddk.org.tr/english/publicationsandreports/brsareports/annex_report_towards_a_sound_turkish_banking_sector%20.doc. 07.10.2005.

Graph 2: Employment Trends in Turkish Banking Sector (1995-2004)



Note: * Banks are ranked as their belongings to groups on 30 June 2005

*** Figures included number of the employees of the closed banks

Source: Banks Association of Turkey (BAT) www.tbb.org.tr

Considering commercial banks group, the percentage of the university graduates and post-graduates was 52 percent in state-owned banks, 67 percent in privately-owned banks, 76 percent in foreign banks. The same ratio was 72 percent in non-depository banks.

Table 2: Bank Employees By Education (December 2002-June 2005)

	Primary school		Secondary school		University graduates		Post-graduates	
	2002	2005	2002	2005	2002	2005	2002	2005
Commercial banks	1520	1928	51.048	43,953	62.844	76,007	2.917	3,528
State-owned banks	420	311	21.534	18,402	17.595	19,567	609	800
Privately owned banks	958	1507	25.956	24,050	38269	51,954	1.686	2,359
Banks in the Fund*	65	8	2.042	200	3.583	186	196	7
Foreign banks	77	102	1.516	1,301	3.397	4,300	426	362
Non-depository banks	140	92	1.355	1,163	3.054	2,824	393	392
Total	1660	2020	52.403	45,116	65.898	78,831	3.310	3,920

The sector employed 154,000 staff in 6,500 branches in 1990; it now employs 123,000 staff in 6,000 branches. The numbers peaked in 2000 with 170,000 staff and 7,800 branches, then declined rapidly. The productivity gains were

achieved in the post-crisis 2001-03 period during which personnel numbers declined by 28% and branch numbers by 24%.¹⁵

Table 3: Efficiency Indicators in Turkish Banks, 1990-2003

	1990	1995	1999	2000	2001	2002	2003
<i>Depozits (billion \$)</i>	32.5	43.5	89.1	101.6	81.2	86.9	111.2
<i>Assets (billion \$)</i>	58.1	67.0	133.2	154.6	115.3	129.8	178.8
<i>Depozits/assets (%)</i>	56	65	67	66	70	67	62
<i>Depozits/branch (million \$)</i>	5.0	7.0	11.6	13.0	11.7	14.2	18.6
<i>Depozits/employee (million \$)</i>	0.2	0.3	0.5	0.6	0.6	0.7	0.9
<i>Employee/branch</i>	23.5	23.2	22.6	21.7	19.9	20.2	20.7
<i>Assets/employee (thousand \$)</i>	377	463	766	907	839	1,053	1,451
<i>Assets/branch (thd \$)</i>	8,859	10,739	17,320	19,724	16,692	21,259	29,967

Source: Alfred Steinherr, Ali Tukul and Murat Ucer, "The Turkish Banking Sector Challenges and Outlook in Transition to EU Membership", Centre for European Policy Studies, EU-Turkey Working Papers, No. 4/August 2004, pp. 22., http://shop.ceps.be/BookDetail.php?item_id=1146,

5. Governance of Privatization of State Owned Banks in Turkey

Turkish Employment Organization – ISKUR provided a labor redeployment services to jobless bank-workers who have been displaced by the privatization of SOEs, including secondary layoffs, to assist them in rapidly re-entering the labor market. More than 3 thousand jobless bank employees attended to project and educated to find a new work in banking, insurance and other financial sectors. Project will be continued during the next three years¹⁶.

As Table 4 shows us that total cost of the banking sector crisis in 2001 reached to the sum of 53.2 billion US Dollars. Huge amount of the cost borned by restructuring of the state banks and private commercial banks transferred to the SDIF.

¹⁵ Alfred Steinherr, Ali Tukul and Murat Ucer, *The Turkish Banking Sector Challenges and Outlook in Transition to EU Membership*, Centre for European Policy Studies, *EU-Turkey Working Papers*, No. 4/August 2004, pp. 22., http://shop.ceps.be/BookDetail.php?item_id=1146. 08.07.2005.

¹⁶ Milliyet Daily Newspaper, 12 Dec. 2003

Table 4: The Cost of The Banking Sector Crisis

	Billion \$	% of GDP
Cost to the Treasury	43.7	29.5
• <i>Restructuring of the state banks</i>	21.9	14.8
1. "duty losses"	19.0	12.8
2. Recapitalisation	2.9	2.0
• <i>For private banks transferred to the SDIF</i>	21.8	14.7
Cost to the private sector	9.5	6.4
• <i>Cost borne by the SDIF</i>	6.7	4.5
• <i>Capital injection by shareholders</i>	2.8	1.9
Total	53.2	35.9

Source: Alfred Steinherr, Ali Tukel and Murat Ucer, "The Turkish Banking Sector Challenges and Outlook in Transition to EU Membership", Centre for European Policy Studies, EU-Turkey Working Papers, No. 4/August 2004, pp. 5., http://shop.ceps.be/BookDetail.php?item_id=1146,

The first Privatization Social Support Project started in 2001. PSSP I, helped to support the Government's effort to disengage itself from production activities and thus foster the continuing development of the private sector in Turkey. The World Bank approved a US\$465.4 million (Euros 360 million) Second Privatization of Social Support Project Loan (PSSP II) for Turkey in June 14, 2005. The project's main objective was to support the Government's privatization program through mitigating the social and economic impact of the privatization of state-owned enterprises (SOEs). The Government's privatization program aimed to enhance the efficiency and competitiveness of the Turkish economy and thereby help in meeting the market demands of EU accession. The Privatization Administration had been in charge of the overall implementation of the project, which was composed of the following components:

- **Job Loss Compensation:** This component ameliorated the temporary social and

economic impact on workers displaced during the privatization of SOEs. It financed severance and related payments, as regulated by law, to workers displaced by job loss due to the privatization of SOEs.

- **Labor Redeployment Services:** This component provided labor redeployment services

to workers who have been displaced by the privatization of SOEs, including secondary layoffs, to assist them in rapidly re-entering the labor market. The

component financed a variety of labor redeployment services, including job counseling and placement services, retraining, temporary community employment (managed by the Turkish Employment Organization - ISKUR), small business assistance services, and small business incubators (managed by the Small and Medium Industry Development Agency, KOSGEB).

- Management, Monitoring and Evaluation: The objective of this component was to

monitor the impact of labor redeployment services and manage the PSSP II effectively as a whole. The component financed surveys to evaluate the effectiveness of the labor redeployment services in mitigating the social costs of labor redundancies resulting from employment and privatization on selected communities; and undertake in-depth socio-economic analyses of specific communities where privatization has taken place.

6. Conclusion

The Turkish banking experience has clearly shown that during the 2001 crisis, real wages declined and non-wage adjustments which were confined largely to the adoption of flexible arrangements like part-time work, subcontracting to firms some of bank jobs, reduction of working hours through paid and unpaid forced holidays. But, job losses all together were a new phenomenon. Since the crisis of 2000-2001, many other reforms have been implemented in financial sector of Turkey.

Now, employment is increasing in Turkish banking sector, again. But, not enough to hire all the jobless old bank staff. Only a small part of them reemployed since the recovery started after the crisis. Since, the emergence of the crisis, 1,567,000 persons who were unemployed, 390,000 were made redundant during the crisis year, the total number of enterprises going out of business at 600,000 and the number of workers who lost their jobs as high as 2.3 million. Also, during the crisis, GDP plummeted by 7,5 %, the lira was devalued by about 40% and short-term interest rates briefly touched an annual rate of 7,500%. The official rate of unemployment reached to 10% but real is low.

Recently started unemployment insurance payments is not enough to compensate their economic and social losses. Most of them went to find another job in other firms or sectors. They can work only in marketing, accounting, finance and foreign and domestic trade departments...etc., but, a few of them were lucky enough to find a work. Still, unemployment rate remains very high among them.

Losers were not only the employees of the banks, the owners of the banks also, lost their capital and some of them judged and went to in prison. After the 2001 crisis the coalition government lost at the following election. Three of the coalition parties even not gained a sit in the Turkish parlement. The main reason for the financial crisis in February 2001 was the number of instances of malpractice in the banking sector, which collectively brought about a major liquidity crunch. The state intervned to take over a clutch of collapsed banks and poured millions of dollars into saving a corrupted banking system.

The effect of the crisis on the working population was by no means confined to those groups discussed above. Although not systematically documented, there were reports of deteriorating working conditions for workers facing threats of redundancy, including longer working hours without pay, reductions in money wages, delays in the payment of wages, and offers to give holidays earlier than usual. In addition, employers encouraged early retirement and resignation. Workers were probably tempted to succumb to these propositions for fear of losing their severance pay should the firm go bankrupt.

Today, unemployment seems destined to get worse before it gets better. 700,000 new jobs need to be found every year to keep the unemployment level constant. That number is set to rise as the working population continues to grow. If the government meets its target of 5% growth for each of the next three years, it will create 1.65 million jobs over that period, just enough to mop up the increase in the working population. But the labour force could be swelled further by large numbers of workers coming off the land as Turkey invests in its agricultural sector and increases productivity. Agriculture currently accounts for 33.2% of all jobs but only 13.4% of GDP. If the workforce was cut to match the sector's contribution to the economy, 4.4 million jobs would have to be found elsewhere.

References

- [1] AKCAY, O.C., The Turkish Banking Sector Two Years after the Crisis: A Snapshot of the Sector and Current Risks, *Turkish Studies*, Summer 2003, Vol. 4 Issue 2, pp. 169-187.
- [2] Banking Regulation And Supervision Agency (BRSA), *Towards A Sound Turkish Banking Sector*, Access:

- http://www.bddk.org.tr/english/publicationsandreports/brsareports/annex_report_towards_a_sound_turkish_banking_sector%20.doc
- [3] Economist, A promising start, 3/19/2005, Vol. 374, Issue 8418.
- [4] Economist, *What September 11th did, and what it didn't*, 2/19/2005, Vol. 374 Issue 8414, Special section pp. 7-10.
- [5] EREN, A., SÜSLÜ, B., Finansal Kriz Teorileri Işığında Türkiyede Yaşanan Krizlerin Genel bir Değerlendirmesi, *Yeni Türkiye*, Sayı:41, Yıl:7, Eylül-Ekim 2001, ss. 662-674.
<http://www.econturk.org/Turkiyeekonomisi/krz.rtf>, 07.10.2005.
- [6] ERTUĞRUL, A., YELDAN, E., On the Structural Weaknesses of the post-1999 Turkish Disinflation Program. *Turkish Studies*, Summer 2003, Vol. 4 Issue 2, pp.53-66.
- [7] GORVETT, J., Turkish Banks Sell Off, *Middle East*, Sep2001, Issue 315.
- [8] GORVETT, J., There may be trouble ahead , *Middle East*, Jan2003, Issue 330, p. 30.
- [9] *Household Labourforce Survey Bulletins*,
<http://www.die.gov.tr/english/SONIST/ISGUCU/isgucu.html>
- [10] KLEBNÍKOV, P., SWIBEL, M., Gilded Cage, *Forbes*, 3/15/2004, Vol. 173, Issue 5.
- [11] Milliyet Daily Newspaper, 12 December. 2003
- [12] NAZLI, H.K., Banking on Turkey, *The National Interest*, Vinter 2004/05, pp. 114-117.
- [13] TÜRK, M., Bankacılık Krizleri ve Bankacılık Sistemindeki Değişimler, <http://www.Gazetekeyfi.Com/>
Gazetekeyfi/Koseyazilari/Bankacilikkrizleri.Html, 10.10.2005.
- [14] ŞENSES, F. Economic Crisis as an Instigator of Distributional Conflict: The Turkish Case in 2001, *Turkish Studies*, Summer2003, Vol. 4 Issue 2, pp. 92-119.
- [15] STEINHERR, A., TUKEL, A., and UCER , M., “The Turkish Banking Sector Challenges and Outlook in Transition to EU Membership”, Centre for European Policy Studies, EU-Turkey Working Papers, No. 4/August 2004, pp. 22., Access:
http://shop.ceps.be/BookDetail.php?item_id=1146,
- [16] TUNC, H., The Lost Gamble:The 2000 And 2001 Turkish Financial Crises in Comparative Perspective, *Turkish Studies*, Summer2003, Vol. 4 Issue 2, pp. 31-52.
- [17] The World Bank, Turkey: World Bank Supports Second Privatization Social Support Project, Access:
<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/0,,contentMDK:20540423~menuPK:258612~pagePK:146736~piPK:146830~theSitePK:258599,00.html>

- [18] YUKSEL, M., Turkish Banking Sector A Glimpse Through the Parting Clouds, Ak Yatirim, June 16, 2003, İstanbul. Access: <http://www.geocities.com/meterello/GLIMPSE.pdf#search=Turkish%20Banking>.

PRIVATIZATION OF THE EXPORT CREDIT AGENCY EGAP

Markéta Stržínková¹

Silesian University
School of Business Administration
Institute of Doctoral Studies
c/o Atradius Sokolovská 100/94, 186 00 Prague 8
Czech Republic
E-mail: marketa.strzinkova@atradius.com
Phone: +420 236 080 236

Abstract

Credit insurance provides companies with concepts and solutions for their outstanding trade receivables, protecting risks of insolvency and protracted default. In addition to this, credit insurance protects cash flow and this helps the companies in their financing needs. Historically, credit insurance was a part of state export policy to protect receivables of domestic investors in abroad. State offered credit protection throughout Export Credit Agencies (further: ECA). The role of ECA has changed because private credit insurers offered marketable risks. Therefore, commercial business offered by major ECA was privatized due to EU requirements. ECA still play an important role in the non-marketable insurance business. The 100% subsidiary of Exportní a garanční úvěrová pojišťovna, a.s. (EGAP), Komerční úvěrová pojišťovna EGAP, a.s. (KUPEG), which is with 51% the Czech market leader in the commercial credit insurance, will be privatized in an official tender in 2006. The potential investors shall contribute to more competitive position, enable to access Czech exporters both commercial databases and worldwide network. Although the tender is considered as minor in comparison to larger privatizations like Czech Telecom or CEZ, it represents an important milestone for all global credit insurance players.

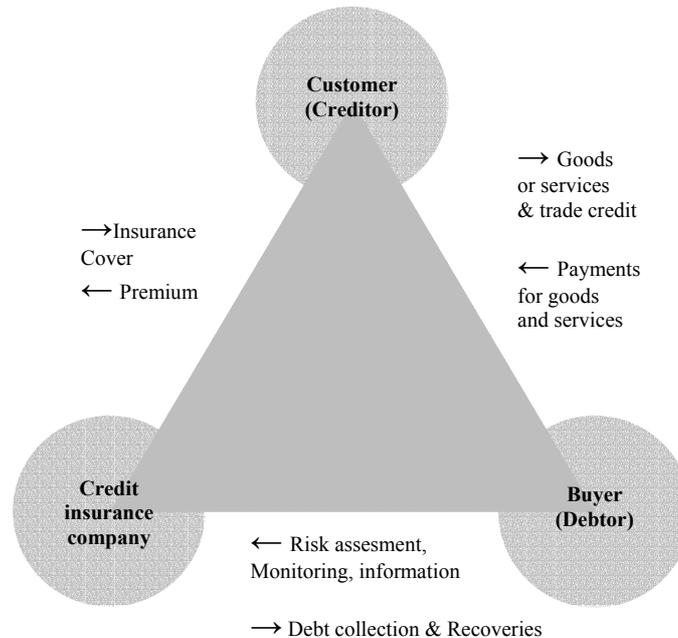
Keywords: *Credit insurance; Export Credit Agency*

¹ The author of this paper is Managing Director of Atradius Czech Republic and her opinion is merely academic and its must not express the opinion of Atradius Group.

1. Introduction

“Credit insurance provides companies with coverage for outstanding commercial receivables, protecting against risk of buyer default or insolvency of the buyer. In addition to managing credit risk, credit insurance supports financing needs: by reducing the risk of non-payment of trade receivables, a firm can borrow at lower interest rates.” (SwissRe, 2000:3).

Figure 1 Credit Insurance Triangle



Historically, credit insurance was a part of the state export policy to protect receivables of exporters and to increase competitiveness of domestic producers. In the meantime, private investors entered the market and cover so-called marketable risks. In the following chapters, I would like to discuss the role of the state in this business and explain why private sector has changed the industry on the example of ongoing privatization process of the State Export Agency EGAP.

2. Credit insurance market

2.1 State Export Credit Agencies

In the beginning of the 20th century, the private sector was not willing to financially support and to transfer the risk of domestic exporters, which led to establishing of state Export Credit Agencies (further ECA). The first one was Export Credit Guarantee Department (ECDG) established in the UK in 1919. Similar activities in several countries followed. Core markets like France, Italy, Spain, and the UK formed the International Union of Credit and Investment Insurers, called the “Berne Union”, which offered exchange of experience within the finance and investment industry, improved risk assesment and underwriting techniques.

The Berne Union comprises of around 45 member states from around 40 countries and its members cover nearly 95% of total global premium income. The Berne Union members provide mainly the coverage as follows:

- (b) Export Credit Insurance for both political² and commercial risks (insolvency and protracted default coverage).
- (c) Investment Insurance (or long-term coverage, exceeding in general 2 years), which protects investments in abroad (e.g. power plants, water pipeline in Iraq, railways etc.). Long-term risk includes higher share on political risk and is closely related to governmental relationships and state policy.
- (d) Project Finance: states through its export credit agencies enable to finance and to stabilize larger projects and their cash-flows in abroad. In the Czech Republic, For example, this is governed through the cooperation between local Export Credit Agency EGAP and Czech Export Bank CEB.

The three above-mentioned types could be also distinguished from the reinsurance type of view in two groups:

- Marketable risks: Reinsurance through commercial reinsurers as MunichRe, SwissRe, AtradiusRe etc.
- Non-marketable risks: Insurance is ceded to the state budget.
- Combined risks. This is combination between the two above-mentioned types; this could be offered only by ECA’s,

² Political risks are mainly war, strike, terrorism, restrictions on transfer of foreign exchange (e.g. Argentina in 2003) and default by governments. However, the definition varies from one insurer to another.

because commercial insurers do not buy state reinsurance. However, after privatization process, many newly established entities are co-owned by the state and therefore are able to cover the risk from both, state and commercial resources. In the Netherlands, for example, after privatization of local ECA The Nederlandsche Credietverzekering Maatschappij N.V. (further: NCM) by Atradius, Atradius continued and developed underwriting of non-marketable risks for the Dutch state. Atradius DSB is the official Export Credit Agency of the Netherlands since 1932 and cover more than € 1.5 billion of Dutch mid- and long-term exposure (more than 12 months) export transactions insured annually (outside OECD).

The distinction between marketable and non-marketable risks is based on the type of reinsurance. In contrast to other insurance lines, credit insurance is strongly dependent on reinsurance appetite. In general, commercial reinsurers are more focused on short-term risks with maximum length of 2 years. Difficulties to find a reinsurer, who is willing to take over e.g. bonding risks lasting over 5 – 7 years, has led recently to significant decrease in bonding products offer in the building and construction industry in Germany and the Nordic States. Credit insurers cede in general 70 – 90% of the risk underwritten, mainly due to higher volatility of the industry, which has direct relation to the business cycle, which is discussed in the following chapter.

2.2 Globalization of credit insurance

The credit insurance business as a financial sector is facing the negative influence of the cyclical business development worldwide and in particular, in the Western Europe. The prices of the credit insurance are growing; on the other hand, the insurance coverage is shrinking because of the decreasing buyers' solvency.

The rating of the insurer goes hand in hand with his creditworthiness. In general, we can say that during depression and recession of the business cycle falls the rating of insurance companies, because they are facing increasing claims ratios³ and their financial position is weakening. Since the Enron scandal are the rating agencies under heightened scrutiny (Swiss Re, 2003:3).

³ Claims ratio (%) is the proportion between claims provisions and claims paid to the premium written.

Dr. David Laster in his sigma study highlights that ratings in the non-life insurance industry have deteriorated markedly in recent years. “The share of industry capacity rated AAA has fallen, on capital-weighted basis, from 38% in 2000 to 17% at present.” (SwissRe, 2003:13).

Looking ahead to 2004, the global macroeconomic picture remains challenging. Although the global economy might be expected to improve towards the end of 2003, boosted by fiscal and monetary stimuli mainly in the US, there remain significant risks. The current account deficit in the US is growing to new record levels, private indebtedness is high and increasing, there is an evident danger of deflationary tendencies spreading in some industrialized countries, and geopolitical risks are still on the agenda. Volatility seems to be the only phenomenon that will last for sure.

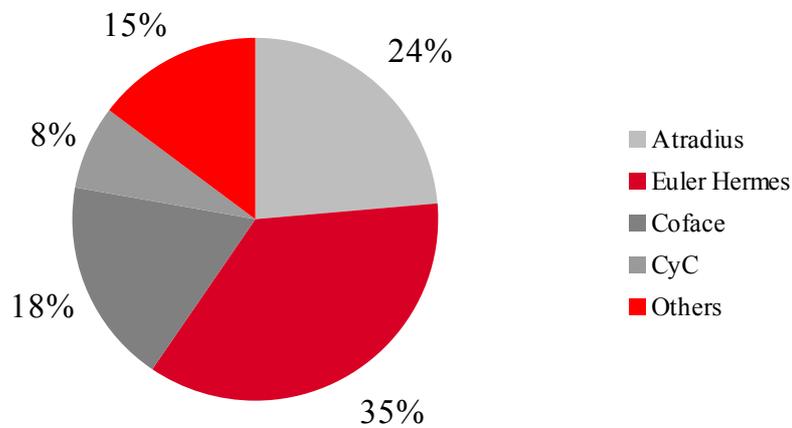
From the view of the credit insurance industry globalization has started in the 90’s. The sector dominated by leading German and French commercial insurers at the end of the 80 has though mergers and acquisitions.

One of the reasons for this market behavior was a high appetite for increase of market share. Mergers are often intended not to use synergies but to buy profits. “The aim was to purchase a profit. They do not want synergies. They want to purchase profit and add them to their own profits. And this is done ten times a year.” (Wisniewski, 2003: 298).

2.3 Commercial credit insurance market

In the early 50’s, first commercial credit insurers have started their business. Among the most known names are German insurers Hermés or Gerling, Dutch NCM or French Namur. At the end of 90’s, the global market consisted of ten larger insurers. From this high number of insurers only three leaders remained and the market became oligopoly. Gerling purchased Namur and NCM and then became Atradius; Hermes is now a part of the EULER Group.

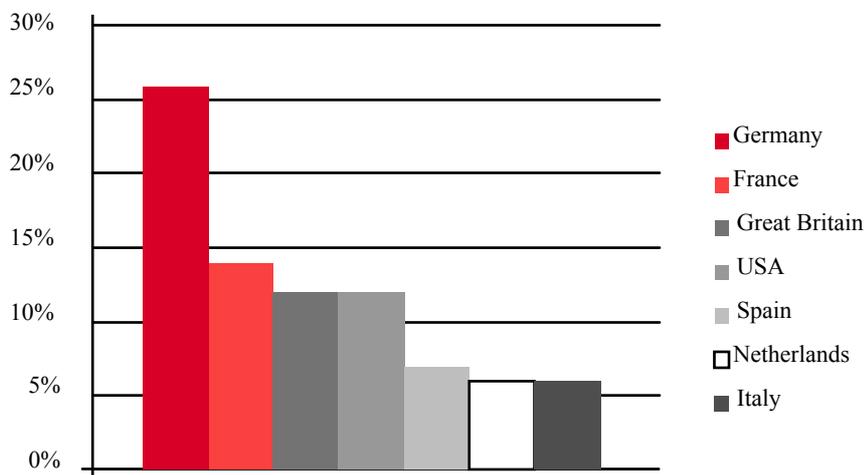
Figure 2 Commercial Credit Insurance market (2004)



Source: Atradius.

Atradius is negotiating its cooperation with Spanish ECA Crédito y Caución and Seguros, which represents 8% of the worldwide market share. This will lead to further concentration in the market. Although, speaking in terms of “global” market, we should have a look at the risk spread and main countries of buyers, which are insured through insurers.

Figure 3 World Credit Insurance Market by Largest Countries



Source: Atradius.

Surprisingly, worlds largest economies, like China, the US or Japan are not present. This depends on (1) different techniques and instruments used for credit protection (the US market is mainly bond-driven, credit insurance plays there still minor role, also due to strong regulated market) or (2) very strong remaining regulation (China – still very strong market protection continues, Japan, the Japanese market was directly entered by Euler Hermés or Atradius in the early 2005). However, as you can imagine, global players are seeking for all opportunities to increase their market coverage.

The question is whether the industry is indeed as global as it may be likes to think it is. The success of international companies invariably relies on focused local presence and knowledge that effectively makes them nationals. The Czech Republic, for example, has been famously home of two fierce competing insurers for 5 years (1998 – 2002), both representing the worldwide biggest credit insurance group EULER Hermes (34% market share).

The additional effect of mergers is that industry leans on the risk spread. Today, global customers have no other options than to choose one of the market leaders. This leads with an increasingly tendency to a growing risk exposure, which might influence the risk management, ratings and reinsurers' behavior.

Some observers could note a lack of competition in the credit insurance market. This lack of competition could stifle innovation, prompt insurers to underestimate in their businesses, or lead to inefficient pricing services. Two salient features of an imperfectly competitive market – high economic profit and barriers to entry – are characteristics of the credit insurance market.

2.4 EU enlargement

The EU enlargement remains on the top of all global economic influences. The main contributions for business will be the emergence of a European market place. A wide range of administrative hurdles like customs or different laws will fade away. For the Eastern European countries new business partners will arise, in the contrary, the firms will be forced to provide competitive business conditions. The credit insurers will be able to provide the cover without having a local license; however, the law will become more comprehensive. The EU enlargement consists of an additional psychological aspect: The Western economies will be forced to consider the Eastern Europe as a part of a whole, the distinction between West and East will unquestionable disappear. In addition to this, states will be forced to

follow European directives and to privatize marketable credit insurance. This is going to happen in all the new EU member states. I cannot state an example, because we follow all the processes at a very early stage.

Both mentioned major influences, EU regulations and globalization, are main triggers for decision of the Czech government to privatize the marketable credit insurance to face the increasing competition.

3. Export Guarantee and Insurance Corporation (EGAP)

3.1 History and role

“EGAP offers credit insurance against the non-payment caused by political and commercial risks. Their activity is carried out with State support on the one hand and based on authorization following from the Act No. 58/1995 Coll., on Insuring and Financing Export with State Support as amended, and the commercial principle on the other, i.e. without State support and with the reinsurance concluded with leading foreign reinsurers. The activity of EGAP enables Czech exporters (...) to offer to their clients the payment terms comparable with the competition.” (EGAP. 2005:6).

3.2 ECA as an interesting aim for investors

EGAP holds its successful market leadership in the marketable credit insurance over more than 10 years, its share in the commercial business has decreased slightly to 51% in 2004, and its claims ratio varies between 55 and 60%, which is slightly above average.

The other two players, Atradius and Euler Hermés share the remaining market share in relation 1:3. Coface has not entered the Czech market at all; although this was announced many times in the past and acts just as a credit information agency. However, there is no clear methodology, which offers a transparent insight into market shares and result presentation. Czech Insurance Association (CAP) offers a half-yearly insight into figures, which do not represent difference between marketable and non-marketable risks, therefore the presentation of the final result may sometimes differ, which strongly depends on the origin of source.

3.3 Privatization of EGAP

3.3.1 Establishment of KUPEG

In compliance to European Union's Communication on the short-term export credit insurance Czech Export Credit Agency EGAP established a 100% subsidiary named Komerční úvěrová pojišťovna EGAP, a.s., "Commercial Credit Insurance Corporation EGAP" (further: KUPEG), where marketable risks were transferred in October 2005.

KUPEG was established as a joint stock company under Czech Commercial Code and Insurance Legislation, whereby in the initial period EGAP shall act as its sole shareholder. KUPEG should take over the entire commercial operations of EGAP, which have been reinsured in the market with major international Reinsurers.

Spinning off the EGAP marketable risks operations into KUPEG should enable, in a subsequent step at a later stage (first half of 2006), to seek a suitable strategic partner, who should ultimately become the majority shareholder in KUPEG, whereby EGAP intends to keep a blocking minority share (in the Parliament, minimum of 30% of stake was approved) in its equity. In selecting a strategic investor, EGAP will seek a trade buyer, i.e. a company already operating in the credit insurance sector, which is financially strong, avails of an extensive database of information on buyers worldwide, and has an intention to develop the credit insurance business in the Czech Republic and in the region. EGAP aims to carry out the divestment transparently and with a "level playing field" for bidders to comply with any applicable EU guidelines or regulations.

3.3.2 Estimated privatization procedure of KUPEG

The initial point of the process to select a strategic partner was the date when KUPEG obtains its Court Registration and became a stock company. There is an important condition precedent to be met – an apparently minor change in the specific legislation, which would clarify the possibility to sell a majority stake in the Subsidiary. The relevant bill is already in the Czech Parliament and is supposed to be approved and signed by the President in December 2005 at the latest.

Although EGAP representatives describe this change as a minor and less relevant, the amendments to the Act 58/1995 Coll. will enable EGAP to start with reinsurance of commercial (marketable) risks and to continue with insurance SME. Those changes will definitely have impact on the future position of the winner of the tender, because he may increase its competitive offer with insurance of non-marketable risks, and use less expensive

reinsurance sources (which are in this case the state budget). As I mentioned before, reinsurance plays a significant role in the credit insurance business and therefore influences the technical result of each insurer. Having opportunity to transfer non-marketable risks or more riskier commercial business to the state will contribute to less competitive market and probably will lead to problems with the EU authorities.

After the Amendment of the Law has been passed, the Czech Government as the sole shareholder of EGAP will first select an advisor and then approve the selection criteria for the strategic partner and privatization of the stake in EGAP KUPEG as such. In an optimal schedule, this Government approval will coincide with the start of operations of KUPEG.

The process of selecting a strategic partner will be broken into three stages and EGAP will be carrying it out with the assistance of an advisor where appropriate. There will be a committee overseeing the whole process. EGAP wishes to keep the process transparent, therefore during each stage all bidders involved in that stage should receive the same information: no bidder should have more than another and nothing should be proffered to one that is not proffered to all. This rule should apply from the time it has been publicly declared that EGAP will be seeking an investor in KUPEG, until a preferred bidder is selected. However, it is publicly known that both EGAP and KUPEG are cooperating with a French credit insurer Coface and use their database. Although Coface purchases its information to each global insurer, KUPEG shares with them data and offers its products with the explanation that this is a product of independent cooperation within Credit Alliance (association of ECA's). Again, this may improve position of Coface in the bidding process. To avoid any speculations, EGAP and the Czech government must state the selection criteria as transparent as possible.

The bidding or tender process consists of three stages:

First stage consists in requests for expressions of interest and selection of potential bidders, then selection of potential bidders fitting basic criteria and meeting the basic preconditions. All the major market players expressed their interest in the process, which means that at maximum three investors will be interested: Atradius, Euler Hermés and Coface. No other investors will be selected into the second stage, although there were some speculations on PPF (owner of Ceska pojistovna), because traditional insurers do not offer this special insurance line at all.

Second stage consists in a selection of short-listed bidders. The purpose of Stage 2 is to cut the field of potential bidders down to a manageable size, whilst also ensuring that suitable candidates get through to Stage 3. Third stage consists in a selection of a preferred bidder. The purpose

of Stage 3 is to prevent from speculation on releasing information to competitors within due diligence process.

The whole selection process of the strategic partner can be estimated to run during the first half of 2006.

4. Conclusion

The worldwide credit insurers are observing the latest developments in the Czech credit insurance market. After spin-off of the division of marketable risks of EGAP into KUPEG, the Czech government announced that a privatization process will follow. An investor from narrow credit insurance market will be selected (Euler Hermés, Atradius or Coface), which will enable Czech exporters and producers to get access to competitive information databases, competitive products and prices. However, the Czech government should prepare the whole selection criteria very transparently because both EGAP and KUPEG are collaborating with Coface, which has not entered the Czech credit market at all and might be in possession of insider information. The privatization process is the first in the Eastern European countries.

References

- [1] Atradius. *European Barometer*. Atradius, 2004.
- [2] BURNES, B. *Managing Change. A Strategic Approach to Organizational Dynamics*. Prentice Hall, London 2000, 3rd edition.
- [3] DEPAMPHILIS, D. *Mergers, Acquisitions and Other restructuring Activities*. London 2003, 2nd edition.
- [4] EGAP. *Annual Report 2004*, May 2005.
- [5] EGAP: *Process of Establishing a Subsidiary Company for Marketable Risks Credit Insurance Operations*. Press Release. Prague, April 2005.
- [6] GALTUNG, J.: What did people predict for year 2000 and what happened? *Futures 35*. Elsevier science Ltd. 2002. Access: www.elsevier.com/locate/futures
- [7] Gerling NCM fusion. *Global Credit Management 2002*. London, 2002.
- [8] HAMMER, M.: *The Agenda*. Business Books, 1st edition, London 2002.
- [9] HAMMER, M., CHAMPY J. *Reengineering*. Management Press. Prague 1996, 2nd edition.

- [10] HATCH, M. J.: *Organization theory: Modern, Symbolic and Postmodern Perspectives*. Oxford University Press. Oxford 1997, 1st edition.
- [11] JOHNSON, J., SCHOLLES, K.: *Exploring Corporate Strategy*. Prentice Hall, 3rd edition, Hertfordshire, 1993.
- [12] KOTLER, P.: *Principles of Marketing*. Prentice Hall, 2nd edition, Englewood Cliffs, 1983.
- [13] MEYER, BERND H., PÜTZ C., HEINZ: *Forderungsmanagement im Unternehmen*. (Credit management in a company) Economica Verlag GmbH, Heidelberg, 2002.
- [14] OECD Economic Outlook No. 72: Country Summaries
- [15] NEBBIA, G.: *Twenty Twenty-five. Futures 35*. Elsevier science Ltd. 2002. www.elsevier.com/locate/futures
- [16] SAMUELSON P.A., NORDHAUS W.D.: *Economics*. McGraw-Hill, Inc., USA, 1992.
- [17] SAUNDERS, M., LEWIS P., THORNHILL, A.: *Research Methods for Business Students*. Prentice Hall, 3rd edition, Essex, 2003.
- [18] Shell International: People and connections. Global Scenarios to 2020. Global Business Environment, 2002.
- [19] STEMMARK: Pojištění občanů. Kvantitativní výzkum. (Private Insurance. Quantitative research). Prague, 2004.
- [20] Swiss Re. Insurance company ratings. sigma 04/2003, Zurich June 2003.
- [21] Swiss Re. Trade credit insurance: globalization and e-business are the key opportunities. sigma 7/2000, Zurich September 2000.
- [22] DEVAUS, D.A.: *Surveys in social research*. Routledge, London 2002, 5th edition.
- [23] WILLE, E., HODGSON, P.: *Making Change Work*. Management Books 2000 Ltd. Gloucestershire 2001, 2nd edition.
- [24] WISNIEWSKI, G. *Operation 9/11 Angriff auf den Globus*, Knaur, Munich 2003, 1st edition

THE IMPACT OF EMPOWERMENT AND SELF EFFICACY ON THE JOB OUTCOMES OF BANK EMPLOYEES: SOME EVIDENCE FROM NORTH CYPRUS

Huseyin Arasli

School of Tourism and Hospitality Management
Eastern Mediterranean University
Gazimagusa – KKTC
Mersin 10 TURKEY
Email: huseyin.arasli@emu.edu.tr

Salih Turan Katircioglu

Department of Banking and Finance
Faculty of Business and Economics
Eastern Mediterranean University
Gazimagusa – KKTC
Mersin 10 TURKEY
Email: salihk@emu.edu.tr

Abstract

In today's competitive world, most of the banks accept that increasing employee satisfaction, enhancing service quality and customer satisfaction are of pivotal importance to their survival and growth. This study aims to develop and tests a model which examines the effect of empowerment and self-efficacy on job satisfaction by using Turkish frontline employees in the banking industry of Northern Cyprus. Also, the study tries to assess the impacts of job satisfaction on the affective commitment and service quality provided by the organizations in the research content. Results reveal that employee self efficacy has significant and positive impact on the job satisfaction. On the other hand, employee empowerment by management staff has significant but negative effect on management commitment to service quality. Empirical results also suggest that management commitment to service quality has significant but again negative effect on perceived service quality by bank customers. Implications of these results for bank chiefs and avenues for further research are also discussed in the study.

Keywords: *Empowerment, Self Efficacy, Job Satisfaction, Service Quality, Cyprus.*

1. Introduction

Employees are essential in the service industry out of serving to the reputation of the companies. Thus, their position is very important in providing service quality and satisfaction of customers. Since frontline employees are at the core of the service delivery; the success is highly depend on their performance (Zeithaml et al., 1988; Schneider, 1980). Moreover, as it has been stated by Tax and Brown (1998), a considerable amount of customer complaints is initiated with frontline employees; and therefore, these organizations need to develop customer focused strategies. Otherwise several mistakes and failures might occur and could result in double deviation from expectations (Boshoff and Allen, 2000; Kotler et al., 1999; Bitner et al., 1990).

Banking and financial services are an important part of the services industry and became sophisticated as new information technologies are adopted in the banking and finance industry. The creation of new information technologies also leads to an improvement in service quality efforts in the banking and finance industry, that is, financial institutions start to give more qualified services to their customers as they benefit from new technologies. Therefore, improvement in service quality naturally is expected to have a positive impact on customer satisfaction. Developments in information technologies, on the other hand, force the institutions in the banking and finance sector to revise and restructure their services by adopting new developments. For example, today, internet banking is the most important facility provided by banks around the world. However, as electronic banking becomes more prevalent, customers still tend to measure a bank's service quality in terms of the personal support they receive, rather than the technical support (Araslı et al., 2005). Thus, services provided by the bank personnel are a major component of service quality and customer satisfaction also in this sector. Since new technologies are important component of the banking industry today, customers are likely measure the level of service quality by the service that they get from bank personnel.

This study aims to develop and tests a model, which examines the effect of empowerment and self-efficacy on job satisfaction by using Turkish frontline employees in the banking industry of Northern Cyprus. Additionally, the present study tries to assess the impacts of job satisfaction on the affective commitment and service quality provided by the organizations in the research content.

Empowerment refers to a situation in which the manager gives employees the discretion to make day-to-day decision about job-related activities (Hartline and Ferrell, 1996). By allowing contact employees to make these decisions, the manager relinquishes control over many aspects of the service delivery process.

Hartline and Ferrell (1996) define job satisfaction as “pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values”. The conceptual domain of job satisfaction is broad, because it includes “all characteristics of the job itself and the work environment which salesmen find rewarding, fulfilling, and satisfying, or frustrating and unsatisfying”. Operationally, job satisfaction consists of several facets, including satisfaction with the supervisor, work, pay, advancement opportunities, co-workers, and customers. Although some studies examine the effects of these facets separately, others average across facets to create a global measure of job satisfaction.

As a key part of social learning theory, self-efficacy refers to an employee’s belief in his or her ability to perform job-related tasks. The importance of self-efficacy lies in its ability to raise employee performance. Self-efficacy grows stronger over time as the employee successfully performs tasks and builds the confidence necessary to fulfil his or her role in the organization. As self-efficacy raises, employees use more effort, become more persistent, and learn to cope with task-related obstacles. Empirical studies confirm that self-efficacy has a strong, positive relationship with employee performance (Hartline and Ferrell, 1996: 54). It is therefore reasonable to expect that contact employees who possess strong self-efficacy beliefs are more likely to create favourable service encounters than those who do not.

Management commitment to service quality (MCSQ) can be defined as encompassing the conscious choice of quality initiatives as operational and strategic options for the firm, and engaging in activities such as providing visible quality leadership and resource for the adoption and implication of quality initiatives. It involves two components: 1) a strong personal commitment to quality improvement and 2) a visible and active involvement in the quality-improvement process. Several authors identify commitment as an important component of successful market relationships because it gives rise to co-operative behaviours (Dwyer et al., 1987; Morgan and Hunt 1994; Garbarino and Johnson 1999). Although some theorists have argued that MCSQ is the single most important determinant of whether good service is

delivered to customers, it has generated little empirical research. Perhaps, the only test of the MCSQ construct fail to find a direct relationship between MCSQ and service quality (Parasuraman et al., 1990). A probable reason for this finding is that the relationship between MCSQ and service quality is indirect. Theory suggests that managers must first possess a personal, affective commitment to improve the firm's service quality. Managers who exhibit this commitment are more likely to take initiatives that help the firm and its employees deliver superior quality. Example of these initiatives include creating more flexible processes, dedicating resources to the improvement effort, promulgating a quality-oriented vision throughout the firm, and rewarding employees for their efforts and commitment to the process.

Management of service quality is about determining the stages of service quality that we can deliver and then promising and delivering that quality of service to customers. Service quality is suggested as the difference between customer expectations and perceptions of service (See Hartline and Ferrell, 1996; Parasuraman et al., 1985; 1988).

The island of Cyprus was divided in 1974 following Turkey's peace operation and Turkish Cypriots formed their own state in the North of Cyprus. The TRNC (Turkish Republic of Northern Cyprus) was founded in November 15, 1983 which is a non-recognized state having a considerably small economy with limited natural resources, a small internal market, and is widely vulnerable to external economic changes. The political and economic isolation of the TRNC created a substantial burden in terms of its foreign trade and international relations with countries other than mainland Turkey. The economy is plagued by over employment in the public sector and economic focus is on agriculture, tourism and higher education sector (Lockhart, 1994). The contribution of the services sector in North Cyprus was approximately 52.3% of GDP in 2002 (SPO, 2004). The Turkish Lira (TL) of Turkey is the official currency of North Cyprus. Therefore, monetary policy is managed by the mainland Turkey and the economy is highly vulnerable to any changes in the Turkish economy.

There are currently thirty two banks operating in North Cyprus of which two are public banks, seventeen are private commercial banks, five are branch banks from Turkey, one is a development bank, and seven are private commercial banks that have already been transferred to the savings deposit insurance fund. On the other hand, seven banks have been liquidated as a result of the banking crises in North Cyprus in the late 1990s. Additionally, there are 34 offshore banks and 5 offshore firms operating in North Cyprus

(Katircioglu, 2002). Total deposits generated by the banking sector in North Cyprus were around 81.5% of Gross National Product (GNP) in 2002. And the contribution of financial institutions was 4.8% of GNP in 2002 (SPO, 2004).

After the emergence of higher education sector apart from 1980s, banks in North Cyprus started to employ more qualified people compared to the past times. In parallel to the qualified workforce in the banking industry, the banks in North Cyprus have experienced a transition to adapting new technologies after banking crises that occurred in the late 1990s. For example, besides Turkish originated banks, some Turkish Cypriot banks also started to provide internet banking facilities to their customers, and majority of them started to provide credit cards and many shopping facilities with those credit cards. That is, currently, banks in North Cyprus are focusing their efforts on attracting new customers and stimulating economic spending by the introduction of credit cards which allow customers to make a wide range of purchases on an instalment basis (Arasli et al., 2005).

This paper is organized as follows: Section 2 defines data and methodology, section 3 gives and discusses the results, and section 4 concludes the study.

2. Data and Methodology

This study employs and revises the original instrument of Hartline and Ferrell (1996) in order to analyze inter-relationship between the triangle of Supervisors, customer-contact employees (frontline employees) and customers in the banking sector of North Cyprus. As can be seen from appendix Table 1, a total of 43 questions were asked to respondents of which 17 questions were asked to supervisors, 16 to customer contact employees and 10 to customers of the banks.

Using those questions management commitment to service quality and empowerment for bank chiefs and/or supervisors; employee self efficacy and employee job satisfaction for customer contact employees; and customers' perceived service quality for customers were also measured as in the original instrument of Hartline and Ferrell (1996).

In this study, general to specific modeling approach is used to access three interfaces of the service process: management-employee, employee-role, and employee-customer relationship in the banking sector of North Cyprus. This approach examines the attitudinal and behavioral responses of

customer and frontline employees (customer-contact service employees) that can influence customers' perceptions of service quality, and equally access the relationship between these responses and two formal managerial control mechanisms which are: empowerment and management commitment to service quality as mentioned before.

The banks are selected for this study as sampling frame because the delivery of banking services requires considerable customer contact. Twelve banks in North Cyprus were targeted for this study. Four Supervisors and bank chiefs (or supervisors) were conducted to carry out the survey. The distribution of these supervisors and customer-contact employees according to their banks are as below:

Table 1. Distribution of Supervisors and Employees in the Banks as Selected for This Study

Data sample	Supervisor		Employee	
	Frequency	Percent	Frequency	Percent
1) T.İşbank.	4	8,3	10	8,9
2) HSBC	4	8,3	9	8,0
3) K.T.K.M.B	4	8,3	9	8,0
4) İktisat Bank	4	8,3	9	8,0
5) Universal	4	8,3	9	8,0
6) Mez.Koop	4	8,3	9	8,0
7) Limasol	4	8,3	9	8,0
8) Vakıflar	4	8,3	9	8,0
9) Halk Bank	4	8,3	9	8,0
10) Ziraat Bank	4	8,3	9	8,0
11) Öğretmenler	4	8,3	10	8,9
12) Şeker Bank	4	8,3	11	9,8
Total	48	100	112	100

On the other hand, customers who benefit from banking services are randomly selected for this study. Detailed demographic distribution of respondents including supervisors and employees is provided in Table 2:

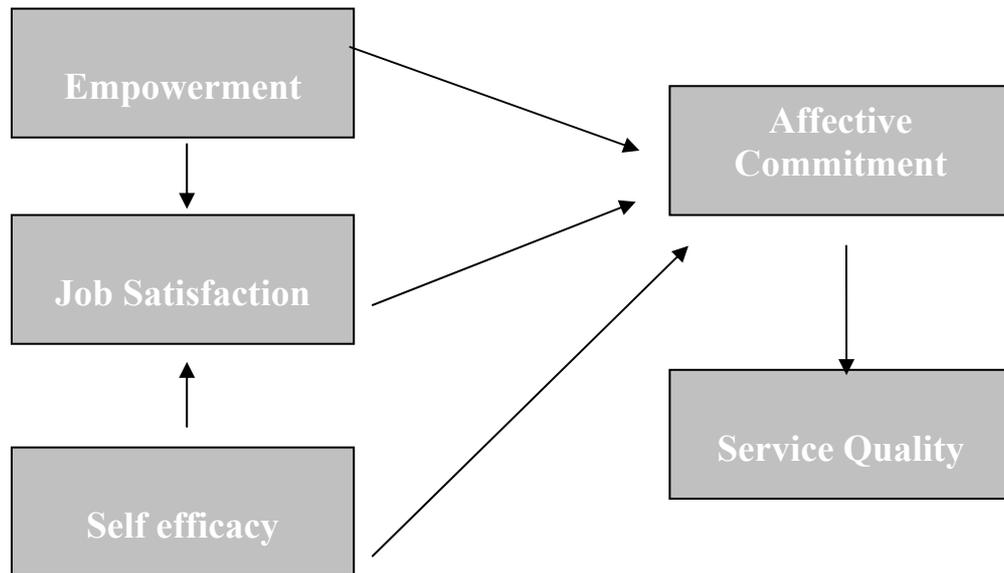
Table 2. Demographic Profile of Sample

	Supervisors n =48		Employee n = 112		Customer n = 203	
	Frequency	%	Frequency	%	Frequency	%
Sex						
Female	20	41.7	59	52.7	72	35.5
Male	28	58.3	53	47.3	131	64.5
Age						
18 to 24	-	-	10	8.9	156	76.8
25 to 30	10	20.8	42	37.5	31	15.3
31 to 36	23	47.9	41	36.6	-	-
37 to 42	13	27.1	19	17.0	8	3.9
43 and up	2	4.2	-	-	8	3.9
Nationality						
North Cyprus	48	100	112	100	134	66.0
Turkey	-	-	-	-	50	24.6
Other	-	-	-	-	19	9.4
City						
Nicosia	26	54.2	40	35.7	50	24.6
Famagusta	17	35.4	54	48.2	126	62.1
Kyrenia	5	10.4	17	15.2	14	6.9
Guzelyurt	-	-	1	0.9	5	2.5
Iskele	-	-	-	-	8	3.9
Marital Status						
Single	-	-	20	17.9	177	87.2
Married	48	100	92	82.1	26	12.8
Education						
College student	31	64.6	55	49.1	13	6.4
University	12	25.0	55	49.1	169	83.3
Academic	5	10.4	2	1.8	21	10.3

Before conducting the main quantitative survey, a pilot study has been carried out in order to test and enhance the questionnaire validity, wording, sequence, and layout. In this pilot study, 20 questionnaires were collected. These had already been used to estimate response rate and to become familiar with respondents.

The conceptual model and the related hypotheses of the present study are given below:

Figure 1. Hypothetical Conceptual Model



Using the above conceptual model, this study will test the effect of empowerment by management staff and self efficacy of employees on their job satisfaction and then the individual effects of these three items on affective commitment. Lastly, the effect of affective commitment on the perceived service quality of customers will also be tested. Therefore, the hypotheses of this study can be set as follows:

H₁: Empowerment by management staff exerts a significant and positive effect on frontline employee job satisfaction.

H₂: Self-Efficacy of employees exerts a significant and positive effect on their job satisfaction.

H₃: Job Satisfaction of employees has a significant and positive effect on affective commitment of management to service quality.

H₄: Empowerment by management staff has a significant and positive effect on their affective commitment to service quality.

H₅: Self-Efficacy of employees has a significant and positive effect on the affective commitment of management staff to service quality.

H₆: Affective Commitment by management staff to service quality has a significant and positive effect on service quality as perceived by their customers.

The respondents for this study were selected from the employees and their supervisors who work in the banks as shown in Table 1 and their customers who benefit from the services of the banks operating in North Cyprus. The number of employees who work in manager, bank chief or executive position selected for this study is 48 people and the number of employees working in customer-contact services is 112 people from various banks based on stratified sampling method. On the other hand, 203 customers were randomly selected from each bank for interview that live in different regions of North Cyprus and benefit from the services provided by banks.

The revised instrument as developed by Hartline and Ferrell (1996) is provided in Tables 3, 4 and 5. Seven-point Likert Scale was employed to measure each construct. First, “Strongly Disagree to Strongly Agree” scale was used for constructs, Management Commitment to Service Quality, Empowerment and self efficacy. Second, “Extremely Dissatisfied to Extremely Satisfied” scale was used for Job Satisfaction. And finally, fifth, “much worse than I expected to much better than I expected” scale was used for the construct of Perceived Service Quality.

As mentioned before, the questionnaire includes different constructs which are asked to managers, employees and customers separately. For example, manager data includes management commitment to service quality and empowerment; employee data includes employee self efficacy and employee job satisfaction; and customer data includes customers’ perceived service quality.

After the original questionnaire of Hartline and Ferrell (1996) was distributed to respondents, the results were typed in SPSS 10.0 software. On the other hand, LISREL 8.3 was also used in this study as it is linked with SPSS to run factor analysis. By the help of factor analysis, it is clearly seen which factors or items in the questionnaire are loaded or not.

Data were analyzed through the use of frequencies, descriptive statistics such as means and standard deviations by SPSS software, and reliability analysis, exploratory factor analysis, correlation and regression

analysis by LISREL 8.30. Simple regression analysis was preferred in this study instead of path analysis due to the limited sample size. Reliability analysis shows the reliability level of the questionnaire to be distributed. Factor analysis shows which constructs or factors are loaded and are ready for analysis. Correlation analysis shows the degree and direction of linear association among the factors. And simple regression analysis shows the effects of independent variables on dependent variable via regression models.

To assess factor, correlation and regression analyses across all three samples (supervisors, employees and customers), the employee and customer responses were aggregated (averaged) and matched with the manager responses to create a single data set in which the cases represent bank units (12 banks) rather than respondents. These procedures resulted in a final sample of 12 banks, as can be seen from Table 1, to be used for correlation and regression analysis. This is why simple regression was preferred in this study (See Hartline and Ferrell, 1996, for more details).

3. Results

Prior to testing hypotheses of this study by regression models each construct will be evaluated by factor analysis if they are loaded or not. Table 3, 4 and 5 display factor loadings and t-values for supervisors, employee and customers data respectively.

In Table 3, factors loadings are generally greater than 0.50 and their t values are statistically significant since they are higher than 2.00 by Nunally (1967). However, there are items which are not loaded as shown by NL, therefore they are extracted from analysis in regression models. Cronbach alpha and reliability alpha values show that this construct in Table 3 are ready for analysis since they are higher than 0.50 by Nunally (1978).

Table 3. Supervisor Data (n= 48)

Management Commitment to Service Quality (MCSQ)		
	Factor	t-value
(Cronbach's α = 0.84; Construct reliability = 0.85)	Loading	
MQ1 I feel strongly about improving the quality of my organization's services	NL	NL
MQ2 I enjoy discuss quality-related issues with people in my organization	1.00	23.76
MQ3 I gain a sense of personal accomplishment in providing quality services to my customers	0.90	19.98
MQ4 I explain to all my employees the importance of providing high quality service to our customers	0.79	16.20
MQ5 I often discuss quality-related issues with people outside of my organization	NL	NL
MQ6 Providing high quality services to our customers should be The number on priority of my organization	NL	NL
MQ7 I am willing to put in a great deal of effort beyond that normally expected in order to help my organization deliver high quality services to our customers	NL	NL
MQ8 The way I feel about quality service is very similar to the way My organization feels about quality	0.67	13.01
MQ9 I really care about the quality of my organization's service	NL	NL
Empowerment (EMPOWER)		
	Factor	t-value
(Cronbach's α = 0.74; Construct reliability = 0.64)	Loading	
EM1 I allow employees completely freedom in their work	0.92	20.77
EM2 I permit employees to use their own judgment in solving problems	0.75	15.25
EM3 I encourage initiative in my employees	NL	NL
EM4 I let employees do their work the way they think best	NL	NL
EM5 I assign tasks, then let employees handle them	0.78	15.97
EM6 I turn employees loose on a job, and let them go to it	0.97	22.95
EM7 I allow employees a high degree of initiative	0.76	15.53
EM8 I trust employees to exercise good judgment	0.95	21.86

NL: Not Loaded

Table 4 display factor loadings and t-values for employee data:

Table 4. Employee Data (n= 112) (Continued)

Employee Self-Efficacy (SELFEFF) (Cronbach's $\alpha= 0.75$; Construct reliability = 0.75)	Factor Loading	t-value
SE1 My job is well within the scope of my abilities	NL	NL
SE2 I did not experience any problems in adjusting to work at this organization	0.81	15.02
SE3 I feel that overqualified for the job I am doing	NL	NL
SE4 I have all the technical knowledge I need to deal with my job, all I need now is practical experience	NL	NL
SE5 I feel confident that my skills and abilities equal or exceed those of my colleagues	NL	NL
SE6 My past experiences and accomplishment increase my confidence that I will be able to perform successfully in this organization	0.77	14.20
SE7 I could have handled a more challenging job than the one I am doing	NL	NL
SE8 Professionally speaking, my job exactly satisfies my expectations of myself	0.78	14.46
Employee Job Satisfaction (SATIS) (Cronbach's $\alpha= 0.86$; Construct reliability = 0.87)	Factor Loading	t-value
JS1 Your overall job	0.82	16.96
JS2 Your fellow workers	0.76	15.02
JS3 Your supervisor (s)	NL	NL
JS4 Your organization's policies	0.71	13.81
JS5 Your support provided by your organization	NL	NL
JS6 Your salary or wages	0.67	12.67
JS7 Your opportunities for advancement with this organization	NL	NL
JS8 Your organization's customers	0.95	21.27

NL: Not Loaded

In Table 4, all of the factor loadings are again greater than 0.50 and their t values are statistically significant. Again Cronbach and reliability levels are higher than 0.50. However, there are again some items which are not loaded as shown by NL.

Table 5 display descriptive statistics for employees: Factor loading, t-value:

Table 5. Customer Data (n= 203)

Customer Perceived Service Quality (QUALITY) (Cronbach's α = 0.67; Construct reliability = 0.57)		Factor Loading	t-value
SQ1	Receiving prompt service from our employees	NL	NL
SQ2	Never being too busy to respond to your request	0.79	21.28
SQ3	Employee behaviors that instill confidence in you	NL	NL
SQ4	The safety you feel in transactions with our employees	NL	NL
SQ5	The courteousness of our employees	-0.80	-21.64
SQ6	The ability of our employees to answer your questions	NL	NL
SQ7	The individual attention you received from us	-0.99	-30.81
SQ8	The personal attention you received from our employees	NL	NL
SQ9	Having your best interests at heart	-0.82	-22.33
SQ10	The ability of our employees to understand your specific needs	-0.91	-26.46

NL: Not Loaded

In table 5, factor loadings are above 0.50 and their t values are greater 2.00. However, only items SQ2, SQ5, SQ7, SQ9 and SQ10 are usable in this study.

Table 6 gives correlation matrix that shows the interaction between each construct. The table gives correlation analysis results as well as means scores and standard deviations for each construct. Mean value of MCSQ is 6.56. This means that Supervisors have positive intentions for management commitment to service quality where they generally agree with this construct items. Mean value of empowerment is 4.33 which mean that Supervisors have positive intentions for empowerment where they medium agree with this construct items. The minimum mean score is 4.33 for Empowerment.

The maximum mean score is 6.56 for MCSQ. This means that Supervisors have positive intentions for affective commitment for their employees. On the other hand, employees have also positive intentions for self-efficacy where they generally agree at 6.21 mean score. Mean value of job satisfaction for employees is 5.77. This means that employees have positive intentions for their job satisfaction.

Table 6. Correlation analysis results

Measure	Mean	SD	1	2	3	4
1.Mcsq	6.56	1.26				
2.Empower	4.33	0.85	-0.874			
3.Selfeff	6.21	0.66	-0.148	0.230		
4.Satis	5.77	0.94	0.389	-0.305	0.611	
5.Quality	5.86	0.80	-0.579	0.514	0.585	0.032

And the mean value of service quality as perceived by employees is 5.86. This indicates that customers have generally founded bank services better than they expected from their banks.

Correlation matrix shows that perceived service quality of customers is positively correlated with empowerment for employees by their supervisors and job satisfaction of employees. It means that as empowerment and job satisfaction increases, the perceived service quality of customers will increase as well. However, a negative correlation was obtained between perceived service quality of customers and management commitment to service quality.

Finally, Table 7 gives the results of simple regression analysis as hypothesized in this study:

Table 7. Hypothesized and Final Models of Service Employee Management: Structural Parameter Estimates (n= 12)

Hypothesized Model				
Path	Hypothesis	Coeff.	t-value	R ²
EMPOWER → SATIS	H ₁ (+)	-0.18	-1.01	0.31
SELFEFF → SATIS	H ₂ (+)	0.42	2.44**	0.61
SATIS → MCSQ	H ₃ (+)	0.39	1.34	0.39
EMPOWER → MCSQ	H ₄ (+)	-0.52	-5.68*	0.87
SELFEFF → MCSQ	H ₅ (+)	-0.10	-0.47	0.02
MCSQ → QUALITY	H ₆ (+)	-0.27	-2.25**	0.34

* and ** indicate respectively significant levels at alpha 0.01 and 0.05 .

According to Table 7, employee self efficacy has positive and significant effect on their job satisfaction as well, thus H₂ is validated in this study. Again, empowerment by management staff has significant but negative relationship on their affective commitment, thus, H₄ is not validated in this study. That means that empowerment by management staff given to employees does not have a positive effect on their commitment of service quality. And lastly, management commitment of service quality has again significant and negative effect on service quality as perceived by customers, thus, H₆ is not validated again. On the other hand, H₁, H₃, and H₅ again were not validated according to the results of this study.

Figure 2 shows the results of conceptual model set for this study according to the research implemented in this study as also introduced previously in this study:

Figure 2. Hypothetical Results of Conceptual Model

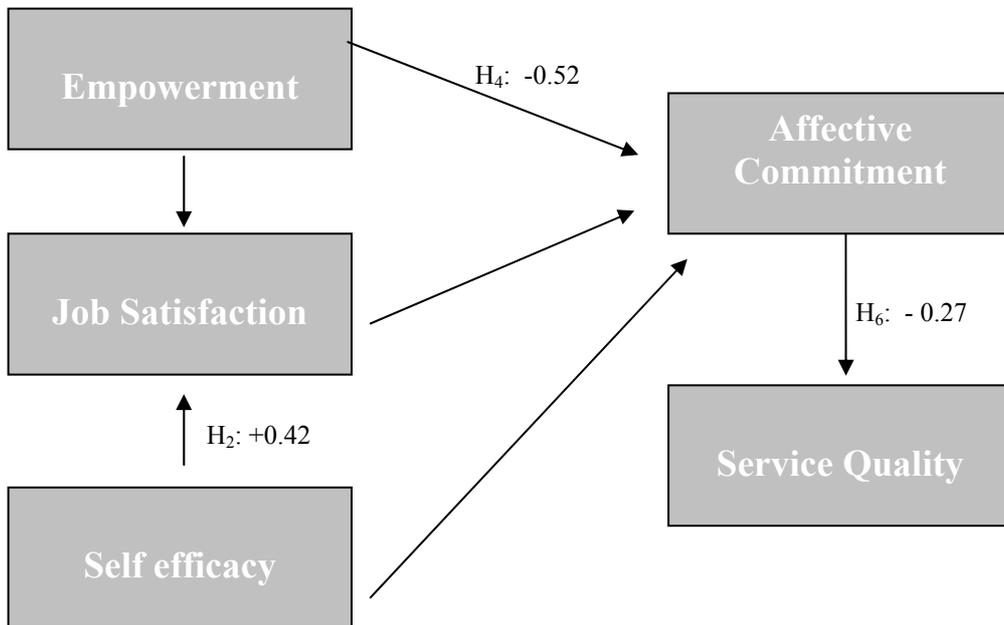


Figure 2 shows that only three hypotheses that were tested via simple regression analysis were found significant. However, two of them are in inverse directions. Thus, only the second hypothesis has been validated according to the results of this study. That is, self efficacy of employees has positive and significant effect on their job satisfaction.

4. Conclusion

This study empirically investigated the relationship between bank chiefs, employees and customers interface in the banking industry of North Cyprus by using revised construct of Hartline and Ferrell (1996). The descriptive analysis that mainly includes mean scores indicates that management personnel and employees in the banks of North Cyprus which are selected for this study has positive intentions about the arguments provided by the constructs of Hartline and Ferrell (1996). And, generally speaking, customers who benefit from banking services are generally satisfied from their banks in North Cyprus.

Additionally, according to the findings of the study, the hypotheses which were run in this study were not generally validated except one mainly due to the small sample size of bank chiefs and employee data which are in parallel to the study of Hartline and Ferrell (1996). Results of this study revealed that employee self efficacy leads to a better job satisfaction of them. Furthermore, management commitment to service quality has significant but negative impact on the perceived service quality by customers. On the other hand, empowerment of employees by management staff exerts significant and negative effect on management commitment to service quality. This indicates the situation that empowerment does not exert a positive impact on employee satisfaction by management in the sample selected for this study. And lastly, management commitment by management staff has significant and again negative effect on perceived service quality by customers according to the results of this study.

The most important limitation of this study is the limited sample size. Due to the limited number of banks in North Cyprus and great difficulty in reaching and convincing bank personnel, this study was put on limited sample size. Therefore, as a suggestion for further research, it can be recommended to expand this study for the whole population size for bank personnel and for greater size of customers in order to test the validity of the instrument of Hartline and Ferrell (1996) for the banking industry of North Cyprus. However, it can easily be said that the results are in parallel with the results of Hartline and Ferrell (1996). And lastly, this type of study can be implemented in both sides of Cyprus to make a comparison between Turkish Cypriot and Greek Cypriot banking industries.

References

- [1] ARASLI, H., SMADI, S. M. AND KATIRCIOGLU, S. (2005), Customer Service Quality in the Greek Cypriot Banking Industry, *Managing Service Quality*, 15 (1): 41-56.
- [2] BITNER, M. J., BOOMS, B. H., AND TETREAULT, M. S. (1990), the Service Encounter: Diagnosing Favorable and Unfavorable Incidents, *Journal of Marketing*, 54 (January): 71-84.
- [3] BOSHOFF, C. AND ALLEN, J. (2000), The Influence of Selected Antecedents on Frontline Staff's Perceptions of Service Recovery Performance, *International Journal of Service Industry Management*, 11 (1): 63-90.

- [4] DWYER, F. R., SCHURR, P. H. and OH, S. (1987), Developing Buyer-Seller Relationships, *Journal of Marketing*, 51 (April): 11-27.
- [5] GARBARINO, E. and JOHNSON, M. S. (1999), the Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships, *Journal of Marketing*, 63 (2): 70-87.
- [6] HARTLINE, M. D., and FERRELL, O. C. (1996), the Management of Customer-Contact Service Employees: An Empirical Investigation, *Journal of Marketing*, 60: 52-70.
- [7] KATIRCIOĞLU, S. (2002), Economic Impact Of Higher Education Sector On Economic Growth Of North Cyprus: Evidence From Co-Integration Analysis, *Journal Of Applied Sciences*, 2 (2): 125-128.
- [8] KOTLER, P., BOWEN, J., and MAKENS, J. (1999), *Marketing for Hospitality and Tourism*, 2nd Edition, Upper Saddle River, New Jersey: Prentice-Hall, Inc.
- [9] LOCKHART, D. (1994), Tourism in Northern Cyprus: Patterns, policies and prospects. *Tourism Management*, 15 (5): 370-378.
- [10] MORGAN, R. M. and HUNT, S. D. (1994), the Commitment-Trust Theory of Relationship Marketing, *Journal of Marketing*, July: 20-38.
- [11] PARASURAMAN, A., BERRY, L. L., and ZEITHAML, V. A. (1990), *An Empirical Examination of Relationships in an Extended Service Quality Model*, Marketing Science Institute Working Paper Series, Report No. 90-122, Cambridge, MA: Marketing Science Institute.
- [12] PARASURAMAN, A., ZEITHAML, V. A., and BERRY, L. L. (1985), A Conceptual Model of Service Quality and Its Implications for Future Research, *Journal of Marketing*, 49: 41-50.
- [13] PARASURAMAN, A., ZEITHAML, V. A., and BERRY, L. L. (1988), A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality, The Marketing Science Institute, Cambridge, MA. *Journal of Retailing*, 64 (1).
- [14] SCHNEIDER, B., PARKINGTON, J. J., and BUXTON, V. M. (1980), Employee and Customer Perceptions of Service in Banks, *Administrative Science Quarterly*, 25 (June): 252-267.
- [15] State Planning Organization (SPO). (2004), *Economic and Social Indicators, Follow Up and Coordination Department*, Prime Ministry, Nicosia, North Cyprus.
- [16] TAX, S. S. and BROWN, S. W. (1998), Recovering and Learning from Service Failures, *Sloan Management Review*, 39 (Fall): 75-88.
- [17] ZEITHAML, V. A., BERRY, L. L., and PARASURAMAN, A. (1988), Communication and Control Processes in the Delivery of Service Quality, *Journal of Marketing*, 52 (April): 35-48.

CROSS -BORDER BANKING MERGERS AND ACQUISITIONS IN EUROPE: AN EMPIRICAL INVESTIGATION¹

Asma Ben Salem

93, chemin des Mouilles- B.P.167

69131 Ecully Cedex

France

e-mail : bensalem@gate.cnrs.fr

telephone: +33(0) 472 86 60 74

Abstract

Cross-border mergers and acquisitions have not been a major feature of the EU banking sector with the dominance of domestic consolidation. The introduction of the euro, the globalization of financial markets and the technological advances have led to acceleration in the process of European banking integration. An important concern arises about the driving forces behind the current banking consolidation wave in Europe in the context of international banking expansion. The aim of this paper is to identify some countries or characteristics of countries that will affect the trends of foreign direct banking investments via mergers and acquisitions across Europe. We use a panel data of cross-border banking mergers and acquisitions in the main European countries from 1987 to 2004. Moreover, we distinguish between receiving and investing countries of cross-border banking investments in Europe. Considering the internationalisation banking literature, we test whether the characteristics of home and host countries would affect cross-border banking investments within Europe. The findings confirm the importance of banking market concentration as a determinant of further international growth of European banks. The European deregulation seems to have exerted a greater influence on foreign banking investments across Europe.

Keywords: *Cross-border banking, mergers and acquisitions, Multinational banking, Europe*

¹ I am grateful to Jean-François Goux and Dhafer Saidane for their guidance and supports. I would like to thank Rémy Contamin for helpful comments and staff at Economic Department of the Credit Agricole for their hospitality and for giving me access to database used for this study. Any remaining errors are my own.

1. Introduction

The European banking landscape has experienced a profound restructuring since the mid 1980s and still is substantially changing. The change has been driven by a tremendous technological progress, the ongoing national and European deregulation, the implementation of the European Monetary Union (EMU) and ongoing globalisation (Bis (2001)).

The gradual elimination in most countries of barriers to international capital flows, jointly with a general relaxation of barriers to operating across geopolitical borders has made possible the ongoing expansion of international financial institutions.

Allowing the production of financial services at large distances from the home country headquarters, the new communications, information and financial technologies have helped banking institutions to take advantage of these relaxed geopolitical barriers. As well, the globalization of no financial economic activity has increased the demand for the services of multinational financial institutions, capable to follow customers operating in foreign countries.

For a number of reasons, domestic banking mergers and acquisitions (M&As) have long outnumbered cross-border banking in European countries. First, most countries have historically used regulations to discourage foreign entry – for example, by requiring foreign banks to hold excess amounts of capital, or by requiring branches of foreign banks to adhere to both home country and host country regulations. Second, the difficulty to operate in a foreign country is also due to the differences in language, business customs, laws and the problems associated with distance that made such investments less valuable. Third, domestic banks might form combinations in order to gain the scale needed to make future cross-border acquisitions themselves or to compete more effectively against potential foreign entrants (*Berger et al, 2004*).

The experience of the European community constitutes a unique case for the investigation of international trade in banking services and cross-border banking activity. The Treaty of Rome in 1957 created the basis for the existence of a European common market. The First Banking Co-ordination Directive of 1977 created a framework for a single European banking market by eliminating differences in banking regulations and practices across the Member States of the EU.

A license from the national authority was needed in most countries to operate in the market. The Second Banking Co-ordination Directive of 1989 introduced a single banking license for operating across the European Union,

aimed at liberalizing the trade of financial services across Europe. Therefore, a bank authorized to operate in a member country could operate in any other member countries without any further local authorization. However, national European governments can not formally allow foreign banks entry that involves the acquisition of national banks². Given the important obstacles to cross-border banking activity, some studies (Berger, 2000; Boot 2002) outline the limited relevance of the traditional economic rationale to explain the banking movements abroad. In this respect, recent research tried to provide an alternative argument, specific to the international banking growth strategies. In other side, the recent changes in the macro environment suggest that pan-European consolidation is likely to accelerate:

- i. The ECB and European Commission are actively pushing for the creation of an integrated financial system to better allocate capital across Europe and increase competition in banking services.
- ii. Regulatory harmonisation has increased significantly compared with the last ten years (Basel II, IAS/IFRS) making accounts much more transparent and reducing “regulatory” risks”.

In this context, consolidation activity among European banks significantly increased within the last decade and in particular within the last two years.

In this paper, we study the determinants of cross-border banking M&A activity in Europe, given the context of the recent phase of banking internationalisation. Using the data of banking M&A operations over the period (1987-2004), we perform the analysis of countries’ characteristics in order to explain cross-border investments by banking institutions in Europe. Our contribution consists in distinguishing between investing countries and the target countries of foreign banking acquisitions. Considering the theory of comparative advantage, we have tested whether some countries have, and/or some characteristics of countries yield, advantages at receiving foreign banking investments or investing abroad via cross-border M&As.

The remainder of the paper is organized as follows. The next section highlights the previous empirical evidence on cross-border banking activity and sets up the theoretical background for the empirical analysis of M&As trends. Section 3 describes the data set and presents the results of empirical analysis on the characteristics of countries concerned by cross-border banking M&A activity.

² The recent attempts by BBVA and ABN Amro to acquire the Italian banks BNL and Antonveneta constitute a good example of this situation.

2. Theoretical and empirical research on cross-border banking

An important research on banking consolidation in Europe examined the external factors that facilitate European banking integration and consolidation. These factors include (i) the globalisation of the international financial system due to the liberalisation of international capital movements and financial deregulation within countries; (ii) major technological advances, particularly in the field of data processing; (iii) improvements in the cross-border regulatory environment linked to the Single Market Programme and the introduction of the euro. Other studies focus on the motivations of banks to expand in foreign markets and the obstacles that they face to be so efficient and competitive as the domestic institutions.

2.1 Theoretical background of cross-border banking activity

Previous research has emphasized the importance of barriers to entry as a main determinant of cross border banking movements. Regulatory restrictions in the host country have been often mentioned as a barrier to entry in multinational banking. A pre-requisite for entering a foreign country is obviously, that the national authority allows the entry. As it has been previously noted, regulatory barriers were formally removed within European Union through the Second Banking Directive. Nevertheless, factors as the existence of hidden restrictions, as well as non-regulatory barriers could at least partially isolate national banking sectors from competition (Balandon, 2000).

Many theoretical and empirical studies focused on the motivations of international banking. According to the results of research on international banking activity, the banking motivations to expand on foreign markets (through M&As) can be classified in four main rationales:

- servicing exporters from the home country
- servicing foreign subsidiaries of home country clients
- participating in the host country's capital markets
- participating in the host country's banking system or banking consolidation process.

A main motive for *foreign banking investments* is to provide banking services to home country clients. The range of banking services typically offered would include the provision of information about the general and economic conditions for doing business in a particular foreign country and, above all, the collection of receivables for home country exporters. The rationale of this behaviour would be the need to preserve existing banking relationship in the

home country before they could be eventually substituted by a new banking relationships (Williams, 1997).

Banks following their clients' multinational expansion has been widely considered as a main motivation of cross-border banking movements. Grubel (1977) applied the theories of foreign direct and international trade to the internationalization of banks that provide the theoretical explanation. According to this explanation, multinational banks go abroad to service their domestic customers who have gone abroad. Information asymmetries regarding local banks about the client's financial needs would constitute a main ownership advantage for the foreign bank.

The Eclectic theory provides the theoretical framework of international banking based on the three concepts: ownership advantage, location advantage, and internalization advantage. The presence of these advantages allows the foreign bank to overcome the advantages possessed by the domestic banks due to incumbency. Given the basic characteristics of the financial services industry, the eclectic framework predicts that banking institutions are more likely to move across international boundaries via foreign direct investment rather than by cross-border trade.

Ownership advantages are resources or production processes to which firms in the host countries do not have access. These proprietary assets that are typically knowledge-based are crucial factor to prompt foreign direct investment because given the possibility to move knowledge-based assets across great distances at low cost, and to be applied to multiple plants at low marginal cost. These advantages in the form of intangible, customer-specific, and knowledge-based assets are important for providing credit to small- and medium sized enterprises (SMEs);

Location advantages are conditions in the host country that make it profitable for a multinational enterprise to produce in the host country rather than producing at home and export to the host country (Berger et al, 2004). Some examples of location advantage are cheap factor prices in the host country; high transportation costs; import quotas and tariffs; and better access to the host country customers. The factors relative to location advantages in multinational banking include differences in regulatory structures, the geographical dispersion of the bank's client base, leading to banks following their retail customers, information collection, and access to a skilled pool of labors.

Internalization advantages are conditions, which preclude a firm from simply licensing its 'knowledge capital' to a host country firm. For example, the existing flow of information resulting from the bank-client relationship would not be pre-empted by a potential competitor bank according to Casson

(1990). The underling hypothesis to this point of view is to consider the bank's information network and its infrastructure of skills that correspond to the personal contact, as one of the main advantages of a multinational bank. Therefore, owning information-gathering centers in a variety of locations can enhance these advantages. Williams (1997) considers the ability of the multinational bank to institutionalize and learn from this network of information as source of its comparative advantage.

Banks have traditionally played a major role in domestic and international capital markets. The growing expansion of commercial banks towards the securities business should make this trend to continue and even increase in the future. Accordingly, some authors have suggested that banks will establish facilities abroad with the aim of participating in the host country's capital market³. Hence, banks would funnel internationally the savings originated in the home country through cross-border acquisitions and have access to the domestic customers more easily. The greater possibilities of diversification available at an international level would justify this behaviour.

Participating in the host country banking consolidation should be a quite straightforward motivation for cross-border acquisitions. Accordingly, banks would enter in foreign countries to carry out the typical commercial banking activity lending and accepting deposits. The less concentrated foreign markets are more likely to be the targets of cross-border banking investments.

2.2 Previous evidence on international banking activity

Previous research on international banking provides empirical evidence on the following issues: the limited economies of scale and synergies achieved on cross-border M&As, the difficulties associated to cross-border banking activity, the performance of international banks in foreign markets and the strategic rationale of international banking growth. The empirical evidence on cross-border banking M&As confirms the consensus view that cross-border deals add limited value. The academic research on cross-border acquisitions of financial institutions in developed countries suggests mediocre post-merger financial performance at best. Examining cross-border operations in Europe, Beitel and Schiereck (2001) found that the associated combined bidder and target value changes were generally zero or negative, compared with domestic mergers, which combined values were positive on average.

A study of U.S. M&As provides some evidence consistent with fewer benefits from cross-border M&As. De Long (2001) found that mergers

³ see Heinkel and Levi, (1992); *Focarelli et al*, (2000).

combining two firms from different geographic areas create less shareholder value. Similarly, the risk-reduction benefits from cross-border bank mergers seem to be no significant as they have little impact on the volatility of stock returns as proved by *Amihud et al.(2002)*. Whereas most empirical studies on efficiency of foreign banks in developed countries found that the domestically owned banks are more efficient, Berger et al. (2000) show the possible exception for U.S banks. In a European study, Vander Venet (1996) found that the foreign institutions have about the same efficiency on average as domestic institutions while a few studies have proving the same evidence. The research on cross-border banking efficiency in developing countries finds different results from those in developed countries. One study of foreign banks in over 80 countries, made by Claessens et al. (2001) reveals that foreign-owned banks have relatively high profitability in developing countries.

The empirical evidence consistent with the hypothesis of limited gains from cross-border M&As are due to the obstacles faced by foreign-owned institutions that limit their efficiency. Accordingly, Buch and DeLong (2004) found that the banks in highly regulated markets are less likely to be the targets of cross-border acquisitions. The results of their study suggest that the cultural differences and the distance tend to discourage this type of operations. Therefore, these kinds of structural factors act as barriers to cross-border lending and borrowing by banks, considering the results of Buch (2001, 2003).

Berger and Smith (2003) detected another obstacle related to the preferences of the customers for the services provided by the local banks. The domestically owned banks have the advantage to have better knowledge of the local conditions and information about domestic customers. In this respect, foreign affiliates of multinational corporations operating in European countries usually choose domestic banks for cash management (i.e., liquidity and short-term financing) services. Other studies have argued that cross-border consolidation within Europe may be deterred by political factors, cultural differences, the use of different payment and settlement systems, and remaining differences in capital markets, taxes, and regulations across the countries (Boot, 2003; Bandon, 2000).

Many empirical studies confirm the hypothesis of ‘following-the client behaviour’ as driving factor of banking internationalization (Grosse and Goldberg, (1991); Wengel, (1995); Brealey and Kaplanis, (1996)). Concerning the latter argument, Casson (1990) has argued that U.S banks expanded offshore to follow the expansion of U.S manufacturing firms. This empirical research supports servicing home country exporters as a determinant of foreign banking expansion. However, the results of Stanley &

al. (1993) and Seth & al, (1998) suggest that this strategy is not the only motivation explaining cross-border M&As. Focarelli and Pozzolo (2001) argued that this motivation is only relevant for small banks, while the behaviour of larger banks is determined by diversification policies.

Previous research has revealed the existence of large and well-developed capital market in the home country, as a determinant of banking expansion abroad. Accordingly, De Paula (2002) suggest that the internationalization of banks could also be explained by the strategy of universal banks seeking to diversify their activities in the financial markets of the host country through the acquisition of majority, controlling stakes or the acquisition of minority. Accordingly, economic conditions in the home and the host countries seem to be key determinants of the foreign banking investments.

A study of Focarelli et al (2001) provide some evidence consistent with the explanation of banking internationalization that is due to increased banking competition caused by financial deregulation. The results of their study suggest that countries with developed financial markets are more likely to be at the origin of cross-border M&As. The empirical evidence reveals that banks expand to countries where the potential economic growth is stronger and the banking sector is less efficient. De Félice and Revoltella (2003) provide some evidence consistent with the importance of regulatory environment and the degree of concentration in the host country and the domestic country of international bank as decisive factor of its strategies to go abroad.

The results of Berger et al. (2004) found empirical evidence of the theories of international trade (*the theory of comparative advantage, the new trade theory*) as theoretical framework to explain cross-border financial M&As. They found that the characteristics of EU countries are determining factors of foreign financial investments as having implications on the comparative advantage of foreign banks.

3. Empirical evidence on cross border banking M&As in Europe

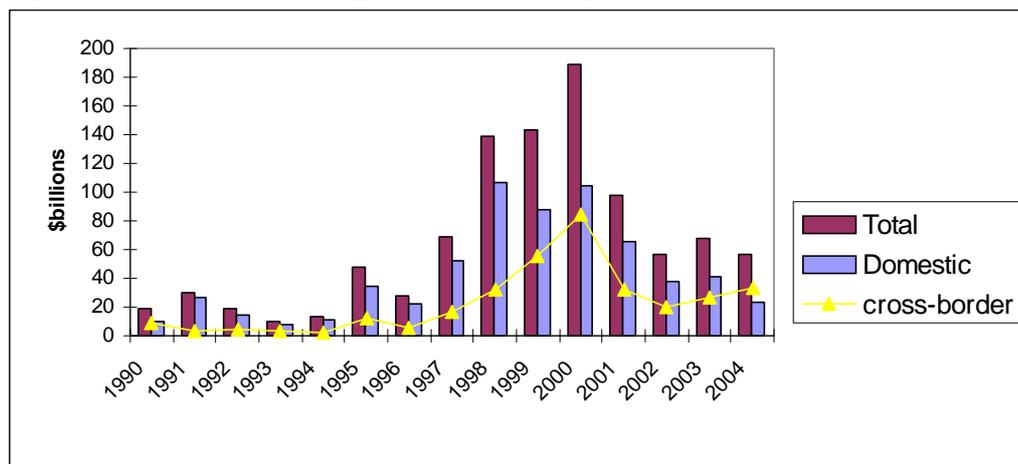
The purpose of our empirical tests is to investigate the patterns of foreign direct investment via cross-border banking M&As through Europe. Unlike most previous researchers, we focus our analysis on international banking expansion in the main European countries only the foreign banking investment through cross-border M&As.

3.1 European Banking M&As trends

The data of M&A trends displayed in Fig1 show a significant mergers and acquisitions activity among large credit institutions took place in the run-up to and the early years of the Monetary Union (1998-2000). During 2003, M&As activity in terms of value stabilised at levels comparable with those seen in 2001 and 2002 (ECB, 2004). Around 70% of the entire transactions volume between 1985 and 2000 is related to national focused banking M&As. European banking institutions thus seem to consolidate their national markets first to become powerful enough to stand the arising competition of a single European market of financial services⁴.

In 2004, the percentage of domestic M&As activity in the banking sector fall to 42% of the total value of M&A transactions. The recent acquisition of Abbey National by SCH explains to some extent this new trend in M&A activity of European banks. This transaction and the recent ongoing deals between BBVA, ABN Amro and the Italian banks (BNL, Antonveneta) suggest more attention on cross-border M&As and arise the question of the future deals between EU financial institutions.

Figure 1: Value of banking M&As in Europe



Source: Thomson Financial Securities data and author's calculations

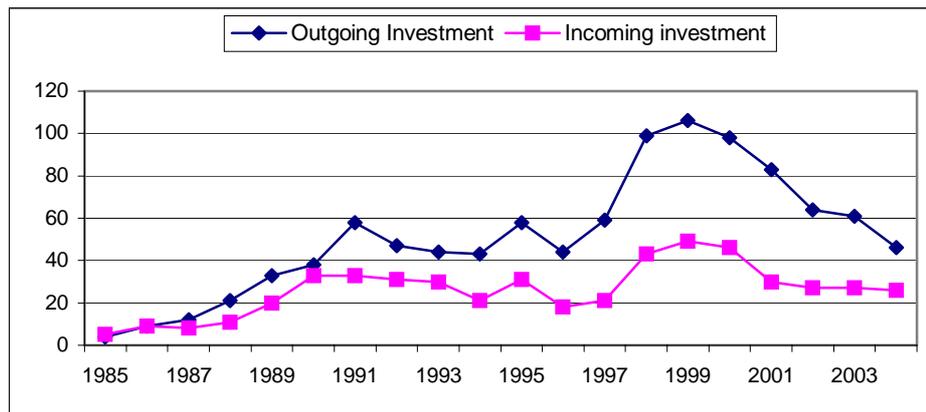
In order to identify the determinants of cross-border M&As in EU, we focus our analysis on investing and receiving countries of foreign banking investments. The data of M&As are taken from the Thomson Financial Securities Data database on M&As from 1985 to 2004. However, the

⁴ Compared to other sectors, banks lack substantially behind with regards to the share of cross-border operations of total M&As (Focarelli and Pozzolo, 2000).

regression analysis begins from 1987 due to data limitations for other variables.

According to the assumption of Berger et al (2004), we consider the M&As in foreign countries as outgoing banking investments and the M&As of foreign banks or Credit institutions in a European country as incoming banking investments. These data for the EU Banking sector as a whole are displayed in Figure 2 that reveals a net investing banking sector with an excess of outgoing investments⁵.

Figure 2 : Number of cross-border banking M&As in EU countries (1985-2004)



Source : Author's calculations based on Thomson Financial Securities Data (2005).

We examined the foreign banking investments in the main European countries (EU) without making restrictions on the target activity of cross-border banking M&As. Thus, we estimate that our data has the advantage to provide a geographic diversification's indicator of banking activities. In this respect, we will test the effects of local countries characteristics on broadening banking scale and scope through cross-border M&As.

⁵ This situation could be influenced by the effect of pan-European banking acquisitions. The number of cross-border M&As in EU include the cross border banking investments between European countries.

Table 1 : Foreign banking investments (cross-border M&As) in EU (1985-2004)

Countries		(1) Incoming investments (target)	% Total EU (%)	(2) Outgoing investment (Investor)	% total EU	(3) = (2) – (1) Net level of cross border investment
Austria	Number	10	1,93	34	3,31	24
	Value	8933,8	5,78	3787,4	1,54	-5146,4
Belgium	Number	24	4,62	108	10,52	84
	Value	3531	2,29	16723,2	6,80	13192,2
Germany	Number	30	5,78	111	10,81	81
	Value	8927,7	5,78	37968,5	15,43	29040,8
Greece	Number	11	2,12	11	1,07	0
	Value	2105,4	1,36	1054	0,43	-1051,4
Spain	Number	74	14,26	122	11,88	48
	Value	10105,5	6,54	51808,1	21,06	41702,6
France	Number	75	14,45	309	30,09	234
	Value	28382,4	18,38	22518,9	9,15	-5863,5
Ireland	Number	21	4,05	20	1,95	-1
	Value	4599,6	2,98	3256,9	1,32	-1342,7
Italy	Number	54	10,40	51	4,97	-3
	Value	9269,8	6,00	10734,9	4,36	1465,1
Luxembourg	Number	8	1,54	15	1,46	7
	Value	3812,7	2,47	1491,3	0,61	-2321,4
Netherlands	Number	19	3,66	44	4,28	25
	Value	4785,7	3,10	14030,5	5,70	9244,8
Portugal	Number	22	4,24	18	1,75	-4
	Value	6060,9	3,92	2735	1,11	-3325,9
Finland	Number	8	1,54	11	1,07	3
	Value	9105	5,90	8178,1	3,32	-926,9
Sweden	Number	13	2,50	35	3,41	22
	Value	2578,1	1,67	12529,9	5,09	9951,8
UK	Number	136	26,20	129	12,56	-7
	Value	44993,1	29,13	57205,9	23,25	12212,8
Denmark	Number	14	2,70	9	0,88	-5
	Value	7247,2	4,69	2017,6	0,82	-5229,6
European Union	Number	519	100	1027	100	508
	Value	154437,9	100	246040,2	100	91602,3

Source : Author's calculations based on Thomson Financial Securities Data (2005).

Table 1 displays the aggregate transaction value and the number of M&As for the period 1985- 2004 in all EU banking systems and their net level of internationalisation. The data of cross-border banking activity reveals

some EU banking systems as net investing and others as net receiving of foreign banking investments. The first group include Belgium, Germany, Spain, Netherlands and Sweden, which have higher level of outgoing investments in terms of number and global value of M&As than receiving banking investments. In other side, Greece, Ireland, Portugal, UK and Denmark are considered as receiving countries taking into account the number of cross-border M&As.

Nevertheless, the high value of outgoing investments in some countries (Italy, UK) suggests the large scale of cross-border acquisitions in the main European countries. The high level of receiving banking investments in France, Austria, Luxembourg and Finland is consistent with this assumption of large cross-border deals in these countries. Considering the number of cross-border M&As, we found the same countries as investing countries.

The differences between the number and the value of M&As illustrate the importance of target and investing countries characteristics as determinant of the net level of their internationalisation. In this respect, some target countries of incoming banking investments have some comparative advantage that explains the high number of cross-border M&As in these countries. The data are consistent with the assumption that these countries have more banking institutions with the potential to make cross-border acquisitions or which are attractive targets for cross-border M&As. As illustration, we note that the large European countries as France, UK, Spain, Germany and Italy have the highest share of cross-border investments. This result suggests that the scale of M&A operations in these countries have been important.

The degree of concentration of the banking systems and the characteristics of their countries are determinant factors in cross-border banking investments. The discussion about other determinants of cross-border banking movements within Europe is presented in next section.

3.2 Model, data and variables

To investigate the determinants of international banking investments in Europe, We test the following model using the data of cross-border M&As for the period (1987-2004).

$$BKEXP_{i,t} = a + \sum_{i=1,N} \alpha_i CountryiDummies + \sum_{i=1,N} \beta_i x_{it} + \varepsilon_{i,t}, \quad i = 1, N; \\ t= 1...T \quad (1)$$

$$BKIMP_{j,t} = b + \sum_{i=1,N} \alpha_i \text{Country}j\text{Dummies} + \sum_{j=1,N} \beta_j x_{jt} + \varepsilon_{j,t}, i = 1, N; \\ t= 1...T \quad (2)$$

Where $i = 1, N$ indexes the home country of foreign banking investments; $j=1,N$ indexes the receiving countries of cross-border banking investments and $t = 1, \dots, T$ indexes the year the M&A was announced. The explicative variables displayed in the Table 2 are chosen on the basis of the theoretical and empirical evidence discussed above.

The dependant variable in the first regression ($BKEXP_{i,t}$) equals the number of cross-border M&As in year t of banking institutions from the country i . In the second regression, the dependant variable equals the foreign banking investments in the European country j through cross-border M&As.

Table 3: Summary statistics for regression variables, 1987-2004

<i>Variables</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
<i>Dependant Variables</i>				
BKEXP	3.53	5.38	0	32
BKIMP	1.5	2.00	0	13
<i>Country characteristics</i>				
NBKA	0.76	1.21	0	6
CONC	0.43	0.27	0	1
PIBGROWT	2.89	2.52	-6.2	15.6
LPIBCAP	4.30	0.22	3.4128	4.84
PIMP	42.33	24.25	18.5	135.67
PEXP	44.69	28.23	16.3	153.08
INFL	3.40	3.08	-0.2	20.4
OPEN	84.79	53.18	35.9	288.74
DERGLM	0.84	0.37	0	1
FBD	0.81	0.39	0	1
SBD	0.69	0.46	0	1

Sources : Thomson Financial Securities Data, Mergers and Acquisitions on-line Database (2005); DataStream Database (2005) and the author's calculation.

The explicative variables ($x_{i,t}$) and ($x_{j,t}$) correspond respectively to the home and the host countries characteristics of cross-border banking movements through M&A operations. These variables include indicators about the economic and regulatory environment of these countries:

- NBKA: Number of cross-border banking acquisitions of other banking institutions.
- CONC: The share of domestic operations in the total of banking M&A is considered as indicator of the market concentration of the country's banking industry.
- PIBGROWT: annual GDP growth as indicator of economic conditions in the home and the host countries of foreign banking investments.
- LPIBCAP: the natural log of GDP per capita is an other indicator of economic environment.
- PEXP: the ratio of exports to GDP is an indicator of the non-financial firms exports activity.
- PIMP: the ratio of imports to GDP reveals the importance of international firms presence in the target country of foreign banking investments.
- OPEN: the ratio of total exports and imports to GDP measures economic openness.
- INFL: inflation rate in home and the host countries of foreign banking investments
- DERGLM: a 0,1 dummy take the value 1 after the year that restrictions to cross-border movements of capital are eliminated.
- FBD: 0,1 dummy variable that take value 1 from the year that the First Banking Directive was implemented in the European country
- SBD: 0,1 dummy variable indicating the year of the Second Banking Directive implementation.

We assume at a given date that two countries having similar observable characteristics will have approximately the same number of cross-border M&As. The coefficients α_i and α_j reveal the countries specific effects on their outgoing and incoming foreign banking investments. Considering the Hausman tests, we estimate the equation (1) using Fixed effects Model and Random effects Model for equation (2). The Table 3 and 4 display the different specifications of the two equations. The Panel data contains 252 observations for 14 European countries. The United Kingdom was excluded because of missing observations relative to regulatory characteristics. The methodology of tests can be explained by the aim of our study to identify the investing and receiving countries in EU of cross-border banking investments. We assume that the country characteristics increase the likelihood to be at the origin of foreign banking expansion or the target of cross-border M&As.

3.3 *Expected signs*

The signs of the equations (1) and (2) coefficients are predicted considering the empirical results and the literature discussed above. According to the new trade theory literature, banking FDI are more likely into and out of highly developed countries. This assumption implies positive coefficients on LPIBCAP and PIBGRWTH.

Considering the hypothesis “to follow customer abroad” as motivation of foreign banking investments, we predict that the degree of trade openness would be positively correlated with cross-border banking activity. This assumption implies positive coefficients on EXP, IMP and OPEN variables.

Given the law of comparative advantage, the country environments that foster strong banking institutions, more likely to have a competitive advantage over their competitors in the destination market allow them to invest abroad. This implies positive sign on LPIBCAP. Accordingly, the large banks formed from previous banking mergers reach the sufficient scale to expand their activities in other foreign markets. This implies a positive coefficient on NBKA.

The previous evidence on cross-border banking suggests that highly developed economies may also be more attractive for foreign banking investments. Therefore, the same sign of coefficients on the above variables would be expected in equations relative to incoming banking investments.

The signs of coefficients on some other variables (INFL) are ambiguous and different between the two equations *a priori*. The hypothesis that high domestic banking consolidation may increase banking incentives to expand in foreign market, suggests a positive correlation between the degree of banking concentration and the outgoing banking investments. However, the less concentrated markets are more likely to be the targets of foreign banking investments, which imply negative coefficients on CONCj.

In order to distinguish countries which are more likely to be as investing or as receiving country of cross-border investments, we include Country i and country j Dummies in our regressions. The positive coefficient on country i Dummies suggests that country is less likely to be the target of cross-border acquisitions. On other side, the coefficients on country j Dummies are interpreted as indicator of European countries which are more attractive to foreign banking investments.

The First banking directive and the Second banking directive aimed to liberalize the trade of financial services across European borders and to increase the integration of the European banking market. In this respect, the

sign of PDB and SDB will be positive as measure of European banking integration that facilitate the cross-border banking movements. Considering the positive effect of liberalizing capital movements on cross banking investments, we expect that the coefficient on DERGLM be also positive.

3.4 Estimation results

The empirical results of different specifications of the equation 1 are displayed in Table 3 showing the determinants factors of outgoing banking investments in Europe.

The positive coefficients statistically significant on NBKA confirm our predictions. This result is due to the coexistence in the same countries of specialised banking institutions with the diversified institutions, acquiring other financial institutions in foreign markets.

The empirical results confirm the motivations of banking institutions to follow their customers in foreign markets with generally positive and statistically significant coefficients on PEXP. As expected, the degree of trade openness is positively correlated with cross-border banking investments as suggest the positive coefficient on OPEN⁶.

The coefficient on PIBGROWT is negative, contrary to our predictions. However, this coefficient is not statistically significant and the sign of this coefficient become positive when we estimate the specification (4) of the equation (1) using a fixed effect model. This result reveals limited evidence on the positive effect of economic development in the home country of banks on their expansion abroad. However, the negative coefficient on inflation rate is generally statistically significant, which suggests the importance of this indicator of country's economic environment as driving factors of cross-border banking activity.

⁶ The result concern the coefficient on OPEN, relative to fixed effects model specifications' which are not reported in the Table 3.

Table 3 Selected regression results for equation (1) : Dependant variable BKEXP_i,

	Outgoing banking investments ^a			
	FEM (1)	REM (2)	OLS with dummies V (3)	REM (4)
NBKA	0.587***	0.689***	0.587***	0.602***
CONC	-1.165	-1.095	-1.165	-2.144**
PIBGROWT	-0.084	-0.083	-0.084	0.059
PEXP	0.078***	0.034	0.078***	
INFL	-0.193**	-0.219**	-0.193**	0.087
OPEN				-0.002
DERGLM				2.568***
PDB				-0.642
SDB				1.389**
Germany			3.143**	
France			14.007***	
Belgium			-0.530	
Spain			3.893***	
Italy			0.418	
Ireland			-4.636**	
Portugal			-1.089	
Austria			-1.706	
Finland			-1.962	
Netherlands			-2.594*	
Denmark			-2.733**	
Sweden			-1.139	
Luxembourg			-8.961***	
Constant	1.016	2.963*	1.293	1.113
R-squared	0.11		0.68	

Sources: Annual data from 1987 to 2004 based on Thomson Financial Securities Data, Mergers and Acquisitions on-line Database (2005); DataStream Database (2005) and the author's calculation.

The results provide empirical evidence of the hypothesis that banking deregulation process and the implementation of the Second banking Directive has encouraged the cross-banking investments in European Union countries.

Contrary to our predictions about the necessity to consolidate the domestic banking industry before investing in foreign markets, the coefficient on CONC is negative. This result is partly due to the method of calculating

^a The coefficients are *significant at 10%; ** significant at 5%; *** significant at 1%.

the concentration indicator, which implies a negative correlation with the number of cross-border M&As. The low degree of banking concentration comparing to the important cross-border banking investments in some European countries is another possible explanation for this surprising result.

The positive coefficients on countries Dummies and statistically significant suggest that these countries has comparative advantage as investing countries according to the analysis of Berger et al (2004). Accordingly, Germany, France, Spain are likely to be at the origin of cross-border M&As. The coefficient on Italy Dummy is also positive but not significantly different from zero. The countries having negative coefficients statistically significant and considered as receiving countries of cross-border banking investments are Luxembourg, Denmark, Netherlands and Ireland. The rest of countries Dummies are negative and not significantly different from zero.

Table 4 displays the estimation results of different equation (2) regressions. The negative coefficient on the concentration indicator is consistent with the predictions of larger potential of consolidation in less concentrated countries that are likely to be the targets of cross-border M&As. The coefficients on economic environment indicators (PIBGROWT, LPIBPOP and INFL) are generally negative for all regressions of the equation (2) and not significantly different from zero. This result suggests that low inflation for a European country could encourage the investments of foreign banks in this country. Nevertheless, the economic growth of the target's country seems not to be an attractive characteristic for cross-border banking activity across Europe. Contrary to the results of estimating the determinants of outgoing investments, only the positive coefficient on DERGLM is statistically significant although the coefficient on SDB is also positive.

The positive coefficient on PIMP and OPEN are significantly different from zero for all regressions of the equation (2). This result confirm the hypothesis of customer following behaviour as motivation of cross-border banking movements through M&As.

The negative coefficient on Luxembourg Dummy significantly different from zero is consistent with the previous result relative to the regression of outward banking investments.

France, Spain and Italy dummies are the only positive coefficients significantly different from zero in the regression (5). This result suggests that banks in these countries have comparative advantage, which allows them to expand in foreign markets. The rest of country j dummies are negative excepting Germany, Finland and Sweden.

Table 4 Selected regression results for equation (2): Dependant variable BKIMP_j

	<i>Incoming banking investments</i>				
	(1)	(2)	(3)	(4)	(5)
	FEM	FEM	FEM	FEM	OLS With Countries Dummies
NBKA	1.279***	1.282***	1.274***	1.278***	1.283***
CONC	-0.118	-0.116	-0.243	-0.250	-0.124
PIBGROWT	-0.031	-0.028	-0.011	-0.009	-0.028
LPIBPOP	-0.501	-0.763	-1.288	-1.228	-0.499
PIMP	0.030**	0.028**	0.028**		
DERGLM			0.690**	0.673**	
PDB		-0.119	-0.353	-0.350	
SDB		0.163	0.094	0.092	
INFL	-0.037	-0.034	-0.004	-0.006	-0.038
OPEN				0.012*	0.013**
Germany					0.343
France					1.836***
Belgium					-0.590
Spain					0.938**
Italy					0.931**
Ireland					-0.113
Portugal					-0.024
Austria					-0.343
Finland					0.140
Netherlands					-0.076
Denmark					0.162
Sweden					0.456
Luxembourg					-1.874**
Constant	1.671	2.865	4.662	4.641	1.721
R-squared	0.66	0.66	0.67	0.67	0.78

Sources: Annual data for (1987-2004) based on Thomson Source: Financial Securities Data, Mergers and Acquisitions on-line Database (2005); DataStream Database (2005) and the author's calculation.

4. Conclusion

The creation of European Monetary Union, the relaxation of barriers to operating across geopolitical borders and the development of new technologies of communications has led to an acceleration of banking integration process in Europe. In this context, a sharp increase in M&A activity is the widespread trends seen in the European banking sector.

The analysis of foreign investments by banking institutions based on cross-border banking M&A data reveals the investing and receiving countries of these investments in Europe. The first group includes Belgium, Germany, Spain, Netherlands and Sweden, which have higher level of outgoing investments in term of number and global value of cross-border M&A operations than incoming investments by banking institutions. In other side, Greece, Ireland, Portugal, UK and Denmark are considered as receiving countries of banking investments in view of the number of acquisitions.

The empirical tests of the determinants of foreign investments by banking institutions confirm the hypothesis of following clients' behavior as motivation of their expansion in other European countries. The economic growth in the target country seems to be a determinant factor for foreign acquisitions by banking institutions. The low inflation appears an important characteristic of home and host countries of cross-border banking investments within Europe.

The opportunities offered by other European markets appear to be determinant factor of pan-European banking consolidation. The low degree of concentration of banking sector increases the potential for acquisitions by foreign banks, which will contribute to the banking consolidation in the host country. However, the results are not consistent with the hypothesis about the limited margins for consolidation within national boundaries as a driving factor of banking expansion on the EU market.

The results of analysis show a positive correlation between geographic expansion of banking institutions and the diversification of their activities. The European banks seem to focus on banking activities consolidating their domestic position before expanding their activities in the EU market. The deregulation process and the implementation of the second banking directive appear as important factors which largely contributed to accelerate these cross-border movements within Europe.

References

- [1] BERGER, A.N., DE YOUNG R., GENAY H. and UDELL G.F. *Globalization of financial institutions: Evidence from cross-border banking performance*. Federal Reserve Bank of Chicago, Working Papers Series, 1999, n° 99-25.
- [2] BERGER, A.N., DAI Q., ONGEMA S., SMITH D. *To what extent will the banking industry be globalized ? A Study of Bank Nationality and*

- Reach in 20 European Nations*, Board Governors of Federal Reserve, 2001.
- [3] BERGER A., SMITH D.C. Global Integration in the Banking Industry. *Federal Reserve Bulletin*, November 2003.
- [4] BERGER,A., BUCH C.M, DE LONG, DE YOUNG, R. Exporting financial institutions management via foreign direct investment mergers and acquisitions, *Journal of international Money and Finance*, 23, 2004, pp 333-336.
- [5] BIS. *Report on Consolidation in the Financial Sector, Group of Ten*, Bank for International Settlements, January 2001.
- [6] BLANDON, J.G. *Cross-border banking M&A in Europe: An empirical investigation*, Department of Economics and Business, 2000, Universitat Pompeu Fabra.
- [7] BOOT A. Restructuring in the Banking with Implications for Europe, *EIB Papers*, Volume 8, 2003, Issue 1.
- [8] BREALEY, R.A, KAPLANIS E.C. The determination of foreign banking location. *Journal of International Money and Finance* 15 (4), 1996, pp 577-597.
- [9] BUCH, C.M., DE LONG, G.L. Cross-Border Bank Mergers: What Lures the Rare Animal?, *Journal of Banking and Finance*, 2004, volume 28, pp 2077-2102.
- [10] BUCH C.M. *Information or Regulation : What is driving the international Activities of commercial Banks?*, Kiel Institute of World Economics working paper N°1011. 2000
- [11] BUCH C.M. *Distance and International Banking*, Kiel Institute of World Economics, Working Paper No. 1043, 2001
- [12] CLAESSENS, S., DEMIRGUC, KUNT A., HUIZINGA, H. How does foreign entry affect the domestic banking market? *Journal of Banking and Finance* 25(5), 2001, pp. 891–911.
- [13] CONTAMIN, R., PREMILLEUX,V. and BEN SALEM A. Consolidation bancaire paneuropéenne : un point d'étape , *Revue d'économie financière* n° 78, April 2005.
- [14] DE FELICE G., REVOLTELLA D. Towards a multinational bank? European banks' growth strategies, *Banque & Marchés* n°62, 2003.
- [15] FOCARELLI, D., POZZOLO, F. The patterns of cross-border bank mergers and shareholdings in OECD countries, *Journal of Banking & Finance* (2001), pp. 2035-2337.
- [16] GOLDBERG, L.G., SAUNDERS, A. The determinants of foreign banking activity in the United States. *Journal of Banking and Finance* 5(1), 1981, pp.17–32.

- [17] GROSSE, R., GOLDBERG, L.G. Foreign bank activity in the United States: An analysis by country of origin, *Journal of Banking and Finance* 15, 1991, pp 1093-1112.
- [18] GRUBEL, H.G. A theory of multinational banking, *Banca Nazionale del Lavoro Quarterly Review* n°123, December 1977, pp349-63.
- [19] GUAL, J. *Deregulation, integration and market structure in European banking*, ECB Research paper n°397, October (1999).
- [20] JEFFERS E. *Concentration et concurrence dans le secteur bancaire européen*, LA NOUVELLE ECONOMIE BANCAIRE, 2005. ECONOMICA Edition.
- [21] SETH, R., NOLLE, D.E., MOHANTY, S.K., Do banks follow their customers abroad?, *Financial Markets, Institutions and Instruments* 7(4), 1998, pp1-25.
- [22] VANDER VENNET, R. The effect of mergers and acquisitions on the efficiency and profitability of EC credit institutions, *Journal of Banking and Finance* 20, 1996, pp 1531-1558.
- [23] VANDER VENNET, R. *Cross-border Mergers in European Banking and Bank Efficiency*, University Gent Working Paper n° 152, 2002.
- [24] WENGEL, J. International trade in banking services. *Journal of International Money and Finance* 14 (1), 1995, pp 47-64.
- [25] WILLIAMS, B. Positive theories of multinational banking: eclectic theory versus internalisation theory. *Journal of Economic Surveys* 11 (1). 1997, pp 71-101.

Appendix 1	31.03.94	30.06.94	30.09.94	31.12.94	31.03.95	30.06.95	30.09.95	31.12.95	31.03.96	30.06.96	30.09.96	31.12.96	31.03.97	30.06.97	30.09.97
Leverage	10,916	11,278	10,881	13,539	14,155	11,378	11,052	10,040	10,083	9,980	10,742	10,283	10,522	11,072	11,458
Equity multiplier	0,092	0,089	0,092	0,074	0,071	0,088	0,090	0,100	0,099	0,100	0,093	0,097	0,095	0,090	0,087
Return on Assets	0,006	0,005	0,007	0,004	0,004	0,012	0,017	0,019	0,006	0,011	0,015	0,022	0,010	0,016	0,025
Return on Equity	0,065	0,003	0,021	-0,026	0,050	0,103	0,067	0,036	0,061	0,059	0,059	0,087	0,101	0,082	0,135
Asset Utilisation	0,046	0,081	0,109	0,135	0,036	0,069	0,093	0,119	0,034	0,066	0,089	0,139	0,042	0,077	0,131
Net Profit Margin	0,133	0,219	0,176	0,049	0,112	0,194	0,202	0,178	0,194	0,186	0,188	0,177	0,254	0,228	0,210
Net Interest Margin	0,019	0,035	0,046	0,061	0,016	0,029	0,039	0,049	0,015	0,027	0,035	0,045	0,012	0,022	0,029
Earning Assets Ratio	0,865	0,833	0,848	0,836	0,824	0,835	0,830	0,847	0,837	0,850	0,853	0,865	0,880	0,879	0,900
Liabilities to Earning Assets Ratio	1,050	1,093	1,068	1,103	1,121	1,085	1,090	1,058	1,068	1,044	1,047	1,027	1,011	1,011	0,981
	31.12.97	31.03.98	30.06.98	30.09.98	31.12.98	31.03.99	30.06.99	30.09.99	31.12.99	31.03.00	30.06.00	30.09.00	31.12.00	31.03.01	30.06.01
Leverage	9,730	8,511	9,405	8,530	6,158	6,445	6,486	6,356	6,464	6,289	7,233	7,488	7,943	7,895	8,105
Equity multiplier	0,103	0,117	0,106	0,117	0,162	0,155	0,154	0,157	0,155	0,159	0,138	0,134	0,126	0,127	0,123
Return on Assets	0,024	0,007	-0,001	0,001	-0,012	0,003	0,007	0,010	0,014	0,005	0,008	0,011	0,011	0,005	0,008
Return on Equity	0,015	0,059	-0,071	0,016	-0,083	0,021	0,024	0,021	0,030	0,032	0,026	0,024	0,001	0,040	0,029
Asset Utilisation	0,146	0,046	0,075	0,088	0,117	0,031	0,061	0,089	0,113	0,027	0,051	0,075	0,100	0,029	0,052
Net Profit Margin	0,180	0,171	0,002	0,016	-0,105	0,104	0,122	0,133	0,124	0,188	0,161	0,148	0,106	0,177	0,164
Net Interest Margin	0,036	0,010	0,020	0,023	0,034	0,011	0,020	0,028	0,037	0,009	0,018	0,025	0,033	0,009	0,017
Earning Assets Ratio	0,888	0,894	0,900	0,879	0,877	0,884	0,881	0,894	0,888	0,891	0,896	0,912	0,913	0,924	0,928
Liabilities to Earning Assets Ratio	0,975	0,944	0,953	0,962	0,919	0,924	0,928	0,912	0,925	0,917	0,936	0,928	0,936	0,926	0,921
	30.09.01	31.12.01	31.03.02	30.06.02	30.09.02	31.12.02	31.03.03	30.06.03	30.09.03	31.12.03	31.03.04	30.06.04	30.09.04	31.12.04	31.03.05
Leverage	7,896	7,535	7,674	8,084	7,915	8,214	8,456	8,635	8,442	8,847	8,951	9,512	9,729	10,191	11,485
Equity multiplier	0,127	0,133	0,130	0,124	0,126	0,122	0,118	0,116	0,118	0,113	0,112	0,105	0,103	0,098	0,087
Return on Assets	0,013	0,025	0,004	0,007	0,011	0,014	0,004	0,007	0,011	0,013	0,004	0,013	0,015	0,018	0,003
Return on Equity	0,037	0,092	0,028	0,028	0,036	0,031	0,035	0,024	0,039	0,026	0,033	0,090	0,030	0,048	0,037
Asset Utilisation	0,076	0,105	0,022	0,045	0,065	0,084	0,022	0,041	0,057	0,069	0,019	0,039	0,052	0,064	0,016
Net Profit Margin	0,174	0,237	0,164	0,170	0,184	0,181	0,193	0,214	0,231	0,219	0,192	0,346	0,304	0,296	0,200
Net Interest Margin	0,025	0,032	0,008	0,015	0,023	0,029	0,006	0,013	0,019	0,023	0,006	0,010	0,015	0,019	0,004
Earning Assets Ratio	0,932	0,932	0,942	0,932	0,939	0,945	0,952	0,949	0,939	0,956	0,961	0,952	0,963	0,969	0,939
Liabilities to Earning Assets Ratio	0,915	0,909	0,902	0,921	0,913	0,912	0,911	0,916	0,924	0,914	0,911	0,932	0,923	0,925	0,967