Protectionism and Reforms in the Banking Sectors of the Eastern European Countries

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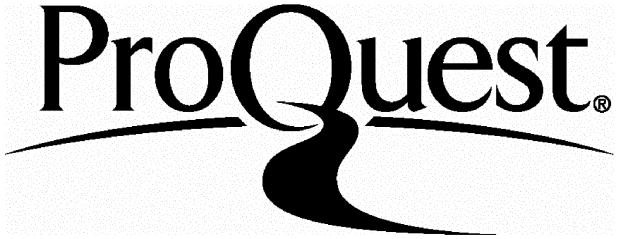

Abstract

This dissertation deals with changes in the banking systems of Poland, Hungary and the Czech Republic, with particular reference to foreign entry. The first chapter establishes a background for research, and depicts the banking systems of these countries at the beginning of reforms and nowadays. Foreign entry is discussed, and methodology to compare foreign and domestic banks performance based on the Cobb-Douglas production function estimation is developed. The second chapter discusses financial repression and deals with one of the key instruments used in Eastern Europe - reserve requirements. The third chapter discusses foreign banks' strategies of entry. It presents results from a survey of the main Western banks operating within the region and also specific case studies of entry. The fourth chapter deals with protectionism and impediments to investment in banking services. Protectionist measures which have been applied in Poland, Hungary and the Czech Republic are identified and discussed. The "Polish Bank Consolidation Programme" is analysed in detail, and some predictions of its effects are made using a translog cost function. The final chapter discusses the costs and benefits of foreign entry, using descriptive methodology and comparing the analysed systems in the framework of a Structure-Conduct-Performance Model.

This study supports the main thesis that the foreign bank entry is one of the most important factors influencing banking sectors of Eastern European countries. The thesis is supported by showing the differences between the development of each banking sector, and arguing that the attitude to and allowance of foreign entry was one of the most important factors explaining these differences. However, foreign entry cannot be treated as an immediate panacea for all problems plaguing East European banking sectors, and the competitive impact of foreign banks is restricted mainly to corporate services.

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List of abbreviations

ACE - Action for Cooperation in Economics

ATM - Automatic Teller Machine

BB - Budapest Bank

BBB - Bydgoski Bank Budownictwa

BC - Bank Creditanstalt

BGŻ - Bank Gospodarki Żywnościowej

BH - Bank Handlowy

BLB - Bayerische Landesbank

bln - billion

BNP - Banque Nationale Paris

BPH - Bank Przemysłowo-Handlowy

BRE - Bank Rozwoju Eksportu

BREE - Bank Research Eastern Europe

BS - Bank Śląski

BWR - Bank Współpracy Regionalnej

CA - Creditanstalt Bankverein

CEDC - Central European Development Corporation

CIB - Central European International Bank

CIS - Community of Independent States

CNB - Czech National Bank

CSOB - Cesko-Slovenska Obchodni Banka

CZK - Czech Koruna

DEM - German Mark

EBRD - European Bank for Reconstruction and Development

EC - European Community

ECC - Enterprise Credit Corporation

EE - East European

EU - European Union

FDI - Foreign Direct Investment

GATT - General Agreement on Trade and Tariffs

GBT - General Banking and Trust Co.

GE - General Electric

GDP - Gross Domestic Product

GNP - Gross National Product

GUS - Główny Urząd Statystyczny

HUF - Hungarian Forint

IBP - Investicni a Postovni Banka

IT - Information Technology

KB - Kredyt Bank

K&H - Kereskedelmi es Hitelbank

LG - Lucky Goldstar

MHB - Magyar Hitel Bank

MKB - Magyar Kulkereskedelmi Bank

mln - million

MNSC - Multinational Financial Services Corporation

NATO - North Atlantic Treaty Organization

NBP - National Bank of Poland

NBH - National Bank of Hungary

OECD - Organization for Economic Cooperation and Development

OLS - Ordinary Least Squares

OTP - National Savings and Commercial Bank

PB - Prosper Bank

PBG - Powszechny Bank Gospodarczy

PBI - Polski Bank Inwestycyjny

PBK - Powszechny Bank Kredytowy

PBKS - Pomorski Bank Kredytowy

PKB - Pierwszy Bank Komercyjny

PKO bp - Powszechna Kasa Oszczędnościowa Bank Państwowy

PAEF - Polish - American Entreprise Fund

PLN - Polish New Zloty

PPA - Pierwszy Polsko-Amerykański

ROA - Return on Assets

ROAA - Return on Average Assets

ROE - Return on Equity

SCP - Structure-Conduct-Performance

SIC - Standard Industry Classification

SME - Small and Medium Enterprises

USD - US Dollar

VAT - Value Added Tax

WBK - Wielkopolski Bank Kredytowy

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To My Father

Introduction

The banking systems of Poland, Hungary and the Czech Republic, which were heavily centralised before the economic reforms of the late 1980s, are transforming into open and competitive ones, most notably by undergoing significant ownership changes. From almost monopolistic state ownership, these sectors are increasingly dominated by foreign investors, and mostly by large global commercial banks. This dissertation brings together the economic debate on the role and place for foreign banks in the domestic economy with an empirical analysis of these banks' performance.

The scope of the study is limited to the three post-communist countries most advanced in economic reforms, i.e. Poland, Hungary and the Czech Republic. **This dissertation focuses generally on the reform period up to the end of 1996**. The pre-reform period is presented in the background, and also in a few cases (notably Poland), data are provided to the end of 1997.

Chapter One starts by outlining the main features of the banking sectors in centrally-planned economies. Then it presents a comprehensive analysis of banking sector development in Poland, Hungary and the Czech Republic. Special attention is devoted to foreign banks, which are increasingly expanding their activities in these countries. In this chapter, much of the research was done as fieldwork in Hungary and the Czech Republic. This included the collection of secondary data as well as a series of interviews with officials of key financial institutions in the given countries (full list in Appendix 5). The last section develops an alternative, Cobb-Douglas production function-based methodology for comparing different groups of banks within EE banking systems. Based on

this methodology, no clear pattern of differences in returns to scale and efficiency was traced between domestic and foreign banks.

Chapter Two focuses on one instrument frequently used by regulators in these countries, i.e. reserve requirements. A comparative analysis of the use of this instrument and its influence on banking sectors in the selected countries was conducted. Quasi-fiscal effects for Hungary and Poland are calculated and compared with other countries. In both countries analysed reserved ratios and implicit tax revenue linked to these seem to be comparably high. The chapter concludes with the finding that the perspective of EU enlargement will significantly diminish the possibility of applying reserve requirements, which should be taken into account by regulators.

Chapter Three discusses the question of foreign entry in the banking sector. This chapter begins with a look at the theory of multinational banking as developed by Grubel (1977) and later researched empirically by, most notably, Sagari (1989) and Goldberg (1989). After the theoretical base was established, a postal survey was prepared and distributed so as to allow a comparison of the different motives, modes and effects of foreign bank entry into the aforementioned countries. Then, selected examples of foreign banks' entry into Poland and Hungary were examined in the case studies. A more "rigorous" approach is applied by using logit/OLS regression to trace main motives of investment. Empirical evidence confirms that the main reason for investing in the EE banking sector is the "follow the client" motivation rather than a search for new business opportunities. Institutional arrangements from investment differ and depend to a large extent on regulatory incentives. Foreign banks tend to specialise in corporate and trade finance services and neglect the retail market. With regard to differences between countries, Hungary is perceived to be the

country with a greater number of business opportunities, while in case of Poland and the Czech Republic efforts are focused mostly on supporting an already existing client base.

Foreign investment in the banking sectors of the East European countries encountered a number of market-inherent and regulatory barriers. **Chapter Four** identifies and analyses the motives and instruments, such as licence moratorium and privatisation policies, used by authorities to protect domestic banks. These policies have generally failed. This chapter also applies a cost function-based methodology of merger appraisal to the "consolidation programme" in the Polish banking system. Expected cost reduction level generally supports the case for this consolidation, as proposed by Bonin and Leven (1996).

Chapter Five looks at the cost and benefits of foreign entry. Calculation of the direct costs and benefits of foreign entry suggest that the direct benefits are relatively modest, and that the main impact of foreign banks is visible in the area of indirect benefits, such as facilitation of the country's access to capital and competitive pressure on domestic banks. However, both these impacts are difficult to measure. A structure - conduct - performance model has been applied to the Polish and Hungarian banking sectors, and results of the estimations are compared to similar results for the Czech Republic. While the results for Hungary are statistically inconclusive, the results presented for Poland and the Czech Republic support the structure-conduct-performance hypothesis i.e. a link between market structure and bank performance.

Chapter 1. Reforms and issues in Eastern European banking

When the transformation process started in East European economies, it was quite clear that one of the main tasks of the reformers would be to re-establish a market-based financial, and particularly banking, system. The crucial role of this development was recognised from the beginning of transition, but the methods applied differ from country to country. Not surprisingly, after more than seven years, the achieved results are also far from being uniform. **This chapter discusses the main problems encountered by reformers, starting from a discussion of the legacies of the previous system.** General assessments of the reform outcomes in the banking sectors of Poland, Hungary and the Czech Republic are presented, with special attention devoted to institutional features: ownership changes and entry of foreign banks. Foreign banks' performance is compared with that of domestic banks. In order to avoid short-term errors, an alternative methodology is developed.

1.1. Banking in the centrally-planned economy

The banking system under centrally-planned regimes was regulated and directed by the Ministry of Finance and the National Bank. Although most of the countries in question had considerable pre-Second World War banking traditions (see: Cottrell, 1997; Cecco, 1994; Antall and Tetenyi, 1994), banking systems in the planned economies developed along the same contradictory lines as the economy as a whole (Zwass, 1979). The schism between the real flows and the monetary flows which existed under central planning resulted in a significant underdevelopment of the banking system. Banks, constituted in most countries by **one single monobank in which commercial and central bank functions were combined**, were not treated as

a special kind of institution, but were regarded as one of the instruments of administrative economic control. In fact, the whole financial system of a centrally planned economy was exclusively a banking system. **No security, money, or foreign exchange markets existed.**

As decisions regarding the physical allocation of resources were more important than financial flows, the possession of money did not automatically give the holder the right to demand resources, particularly in the case of transfers of resources between enterprises (Smith, 1993). The main method of payment was immediate, automatic collection. In this framework, suppliers were protected against non paying purchasers (Antal and Tetenyi, 1994). All enterprises had an account with the national bank, which in turn ran these accounts according to others plan. Soft budget constraints existed, which in fact were caused by enterprises not being bound by their bank balances. Enterprises were obliged to keep their accounts, clear their business transactions and obtain loans only through the monobank's branches, or through other state banks to which they were assigned. However, these banks were not banks which directed money and credit flows. Management of the financial flow was a central administrative task. Therefore, **banks functioned only as relatively insignificant accounting institutions.**

As banks were state-owned and capital markets did not exist, planning authorities were responsible for maintaining macroeconomic equilibrium and also for setting the deposit and credit interest rates and other fees. The function of credit was to finance inventories exceeding the norm, assets affected by seasonal fluctuations, and gaps in funds that could not be controlled or planned beforehand (Zwass, 1979). Financial flows were therefore strictly divided into cash and non-cash circuits, and the convertibility of non-cash money into currency was not guaranteed (Buch, 1996b).

The structure of the banking system which emerged under these circumstances was quite peculiar. As private ownership was excluded from banking[1], short-term credit and clearing operations in the production sphere and strict control over money circulation were exerted by the National Banks. National Banks were the bank of issue, but they also performed commercial bank-like functions, such as running the accounts of enterprises and allocating funds in accordance with the central plan. In order to service foreign trade, some banks from the pre-socialist period, like Bank Handlowy in Poland or Zivnostenska Bank in Czechoslovakia, did not cease operations in centrally planned economies but were nationalised by the state. Moreover, these banks were almost completely subordinated to the National Banks and were generally not exposed to any type of profit-motivated activities. As Slay (1996) correctly noted, they were more like bureaucratic institutions without any business skills related to credit appraisal, product marketing and so on. Only a small proportion of the staff, especially in foreign transaction departments, possessed some market-based skills as foreign exchange oversight or asset and liability management.

Money played a more significant role for households, although to a certain extent it was limited by the shortages of products in the retail sector. Savings banks were in some cases formally separated from the national banks (like PKO bp in Poland or OTP Bank in Hungary), but had concentrated their activities almost exclusively on accumulating cash deposits in local or convertible currencies from the population. Deposits located within these banks were guaranteed on an implicit basis by the state. Granting loans of limited amounts to individuals was also part of saving banks' constrained activities, but the consumption of goods was more restricted by shortages of real products than by households' insufficient monetary balances. Most individual transactions were

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[1] With some exceptions for cooperative banks. However, their activities were restricted and property rights of the cooperative members were limited.

settled in cash, and the use of more sophisticated cash substitutes was limited. As a result of the existing disequlibra in the economy, all the countries in question embarked at the start of reform with monetary and debt overhangs, which were subsequently eliminated in the course of price liberalisation.

No significant changes occurred in the institutional set-up of the EE banking systems before mid 1980s, when some reforms were undertaken. In 1985 Poland institutionally separated PKO bp from the National Bank of Poland (NBP) structure, and in 1987 Hungary created a restricted two-tier system. In fact, in all the examined countries, real reforms of the banking system started in the late 1980s with a break-up of the centrally-planned system. Prior to this date there were only a few, mostly organisational differences between the banking systems in all three of these countries. They arose from the traditional set-up of financial systems, rather than from the dissimilarities of the economic regimes. Table 1.1 summarises these differences and describes the institutional set-up of each individual country.

Table 1.1 Key players in the organisation of banking systems prior to the 1990s.

	Poland	Czechoslovakia	Hungary
Savings	PKO bp.- domestic currency PeKaO S.A. - foreign currencies	Ceska Sporitelna	OTP - domestic GBT - foreign currencies
Foreign trade services	Bank Handlowy	CSOB	MKB
Foreign banks	no	no	CIB, Citibank, Unicbank

Source: Author, based on collected data

When conversion to a market economy started, **it was obvious that one of the most important elements of reform had to be structural**

changes in the financial system. However, quick liberalisation[2] was one of the preconditions of successful reform. In order to overcome macroeconomic difficulties, these countries mostly applied heterodox stabilisation policies, which simultaneously dealt with price liberalisation, the establishment of property rights and macroeconomic stabilisation. In spite of the macro imbalances, microeconomic issues have often been neglected (or else thought to be solvable by freeing prices and assigning property rights), although the extent of this problem might have exceeded even similar issues in less developed countries (as defined by per capita GDP). Price liberalisation, opening up and rapid privatisation did not necessarily eliminate these distortions, but actually strengthened some of them. Their continued existence implies several caveats for policy makers: implementation of macro policies might be difficult, as the response from the microeconomic level could differ from what economic theory suggests; and the inefficient allocation of resources could be maintained, undermining the credibility of reform policies. Even if the domestic financial market has been formally liberalised, inherited institutional structures will *de facto* determine the structure of a financial system for a certain amount of time (Buch, 1996). This was especially obvious with respect to banking sectors, as a number of legacies affected their performance. Indeed, as Wyczański (1993) stated with regard to the Polish banking sector, in all countries undergoing economic transitions:

> [the] process of transformation has encountered many barriers and obstacles stemming both from the legacy of the previous forty years [...] and from inevitable mistakes ensuing from the lack of experience and skills. The fact that money only used to play a passive role in the communist economy [...] was responsible for the fact that financial institutions whose existence is indispensable for the proper operation of an economy based on market principles could not evolve in Poland. (p.7)

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2 For a comprehensive review of main issues in economic reforms see: Lehtonen (1997).

1.2. Framework for reforms

The literature on the reform of the banking system makes several proposals about what should be done and what should be avoided (Anderson *at al.*, 1996; Estrin *at al.*, 1992). **The ultimate goal to be achieved by the banking sector can be defined as follows: to become integrated into the world economy, with contestable soundness, based on private ownership, where the allocation of resources is governed by the price system, and supported by an appropriate legal framework to enforce and complement contracts.** These are the main features of banking sectors in market economies. It is more at the discretion of politics, or perhaps it is better to say it is historically-culturally determined, whether the banking sector will be similar to that of Germany, Great Britain or the USA (Boot and Wijnbergen, 1995). However, views on the sufficient and necessary conditions that are needed to get to this advanced stage might differ substantially.

Von Brabant (1997) correctly summed up the starting point of banking sectors in these countries:

> On the eve of the big transformation, commercial banks, if extant at all, were really not banks in the orthodox sense; they were burdened with poor assets[...], neither households nor the so-called banks had much experience either in collecting savings, in adjudicating loan requests, in marketing diverse financial assets, in effectively clearing reciprocal claims, or for that matter in discharging other banking functions[...]. (p.154)

A number of distortions appear in the functioning of the transitional banking system because of its links to the productive sector (Rostowski, 1995; Slay, 1996). Some features of these links, like ownership relations or the impact of enterprise debts, are characteristic only of reforming EE economies, and differ

significantly from those in a fully fledged market economy. The banking sector plays a crucial role in developing a decentralised mechanism for the efficient allocation of resources, including diversification of systemic risk (Gurley and Shaw, 1955; Fama, 1985). This risk results from the transitional character of the economic, legal and political systems, and as such, it is thought to exceed that of established market economies. In addition, the financial system, particularly its banking function, is also considered to be an appropriate tool for establishing properly ownership rights and solving problems such as screening and monitoring. Three main tasks for reformers of the banking sector can be pointed out:

- Coming to grips with "old debts";
- Recapitalising banks; and
- Installing "commercial rationality" into the behaviour of banks (von Brabant, 1997).

Bank recapitalisation is closely linked with the problem of bad loans, which plague banks in all the countries of the region. As a result, given implicit deposit insurance, bad loans plague the governments and taxpayers of these countries. A large volume of these debts were caused by the fact that under communism, loans were not allocated on a commercial basis. Thus it is hardly surprising that in the new commercial environment many of these loans should turn out to be unrecoverable. Furthermore, bank staff, having had no experience in allocating loans commercially, might continue to misallocate credit for a significant period after hard budget constraints have been imposed.

Most banks have had to face the problem of bad debts or nonperforming loans. As a consequence of both these factors, the allocation mechanism of the portfolios the monobank transferred assets to newly created banks along the old branch lines, and the economic reforms pursued by

governments, A number of explanations for these occurrences exist, and these can be roughly divided into four groups (Buch, 1996b):

- Overall economic deterioration;
- Interest rate rise;
- Inherited lending practices; and
- A weak accounting and information system.

At the beginning, the bad debt problem was hidden by inter-enterprise arrears. Since both banks and enterprises had soft budget constraints under socialism, the uncertainty of the real value of their assets played no crucial role for the credibility and liquidity of the firm. In the transition period, in the absence of an enforced bankruptcy law and privatisation, soft budget constraints were not completely eliminated. An interdependence between enterprises appeared, linking efficient firms to inefficient ones in the form of inter-firm credit and through banks' balance-sheets. When firms answer to harder monetary policies by implementing a mechanisms of not paying their suppliers, the existence of inter-firm credits and/or the extension of credits to customers who are unable to pay create a severe information problem for banks. This is because deciding whether a particular firm is viable - is it a "victim" or "criminal" in the system of inter-firm credits - becomes more difficult. Moreover, even when the inter-entreprise arrears problem was more or less solved, either through the netting-out of debts or other administrative measures, the main "bad debt" problem appeared. The countries in question applied different policies to tackle this problem, and this issue received extensive attention in the literature[3]. In the Czech Republic, a special Consolidation Bank was created which

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[3] See: Rostowski (1995), Chudzik (1995), Varhegyi (1993) and (1994), Balassa (1996), Antal and Tetenyi (1994), Buch (1996b). For statistical data also see Czech National Bank (1996), Abel and Szakadat (1997).

extracted non-performing loans from banks' portfolios. The Hungarian approach consisted of a series of waves of debt buyouts performed by the state. In Poland, banks received Treasury securities in proportion to the volume of individual debt workouts performed by special divisions within banks (Rostowski, 1995).

It is still far from clear which of the adopted methods was the most efficient. Additionally, in some cases[4] their implementations were politically affected and motivated, which obviously disturbed the results. Moreover, the fact of bad debt occurrence was in certain circumstances treated as an excuse for conducting a protectionist policy aimed at preventing domestic banks from foreign competitors (see Chapter 4). In this context, it is worth presenting Buch's (1996b) findings from on a partial equilibrium model with Cournot-type competition, applied to circumstances imitating the EE banking environment:

1. A greater stock of bad debt and lending risk results in a lower volume of lending, more equity holdings and higher interest rate spreads. Opening up markets to foreign banks reduces these spreads.
2. Large losses in state banks create more incentives for central banks to refinance at low-interest rates and to restrict foreign entry.
3. Banks in distress can be kept liquid by a refinancing and deposit scheme. If such a scheme is withdrawn, a full crisis might emerge.
4. Bad debts cause a bias towards existing clients only if these debts are sufficiently high, as they provide an incentive to gamble on high future profits of the debtor firm.
5. Implicit deposit insurance softens banks' budget constraints and as the risk premium is constant, banks are more likely to gamble on resurrection.

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4 For example BGZ recapitalisation in Poland.

As mentioned, all countries - either as a part of reforms undertaken during socialism or as part of transitional reforms - broke up the previous monobank system and created a two-tier banking system aimed at improving allocative efficiency and enabling the pursuing of monetary policy. The central banks allocated portfolios to the newly created banks. These new banks were obliged to continue providing financial services to their clients, the allocation of which to the new banks was more or less *ad hoc*. The portfolios of the new banks mostly covered particular sectors of the economy, i.e. they were assigned enterprises in a certain sector or region (Buch, 1996b). This means that banks did not fulfil one of their major tasks, the diversification of risk, since the correlation between sector - specific shocks and the performance of banks' balance sheets was kept artificially high.

Another aspect of this peculiar "segmentation", which was actually increasing systemic risk, was that corporate and household finances were separated. One or a few large savings banks dealt with deposits and credits for the household sector, while other banks operated only with clients from the corporate sector. This counteracted the aim of promoting competition for household deposits, and consequently lowered the level of savings. According to Bonin and Leven (1996), in 1993 the ratio of household savings deposits to GDP was 24.5% in the Czech Republic and about 20% for Hungary and Poland. In addition, several legislative aspects contributed to the maintenance of 'walls' within the financial system. Depending on the degree of trade liberalisation from country to country, not every bank was allowed by law to be involved in foreign trade, that is, dealing in foreign currencies. This had the adverse effect of concentrating highly skilled staff, which is badly needed by other banks, in these institutions. Concentration of portfolio meant that, for example in the case of Hungary, as of 1993 the largest bank holds one-third of the assets of the entire

corporate sector. Because of the segmentation and the concentration of the portfolios, the fate of the banks depends on that of a few of their clients. The bankruptcy of one or two enterprises could result in bankruptcy of a bank, potentially causing a "chain reaction". Since most banks were still state owned, with management having biased incentives and banks being undercapitalised, banks continue to lend to these enterprises creating an adverse selection problem. In contrast, in case of newly created "private" banks close links to their owners coming from the corporate sector resulted in similar problems.

Legislation often did not require or did not enable the creation of provision for these debts from pre-tax profits, as was the case in Hungary until 1992 and Poland until 1994. Some banks reported extremely high profits in comparison with international banks, mainly because of the neglect of doubtful loans. This portfolio problem, caused by the incentive problem of managers of both banks and enterprises and the resulting information problem banks face, led to a large spread between the lending and deposit rates, as banks tried to solve the cash flow problem they faced. This also distorted the relative creditworthiness of banks and caused valuation problems in the course of privatisation (Kormendi and Snyder, 1996). However, in the short run, it is not the outstanding stock of nonperforming loans but the discrepancy between cash inflows and outflows that can jeopardise the banking system (Abel and Szakadat, 1997).

Ownership of banks by the state as mentioned above creates additional problems. The past history of these countries proves that public ownership cannot overcome the problem of asymmetric information. Furthermore, the relative abundance of assets in state banks exposes them to pressure from special interest groups, as rents can be captured by them. This leads to rent seeking behaviour among the individuals in charge of running and supervising these banks. Some "spontaneous" forms of privatisation might

occur, which in fact leads to insider take-overs on very generous conditions. In some cases (like the privatisation of Bank Śląski in Poland or take-overs by Motoinvest in the Czech Republic) this occurred even as a form of criminal offence, which were later prosecuted. But even the legal grounds of public prosecutions in such cases are very difficult to establish as a result of unclear regulations and fast changing political circumstances. Additionally, according to Kormedi and Snyder (1996), in transitional economies state-owned banks are characterised by negative net worth value, while their inherent franchise value is positive. Once again, this causes the valuation process to be very difficult and complicated. This creates incentives for setting up a quick privatisation based on low net value with annexed provision of cutting off non-performing debts at public expense.

Given the structure of the banking system, governments are confronted with several problems. The ability to achieve policy goals might be impaired by the combination of various micro distortions. One of the main features of the implemented macro stabilisation programs is a strict monetary policy to stabilise the price level and to assure dual objective of the efficient use of the given resources (internal efficiency) and promotion of the restructuring of the economy (external efficiency). In the case of the banking sectors, the latter goal inevitably requires a change of the ownership structure and an increase in competitive pressure.

1.3. Country profiles

This section presents characteristics of the analysed banking sectors up to mid-1997. After giving some remarks on data availability[5], it focuses on ownership structure, foreign banks' entry and their results versus the

[5] Wider discussion of general information sources available is given in Abel and Szakadat (1997b).

results of domestic banks. An alternative measure of banks' performance, based on the production function approach, is presented in section 1.6.

1.3.1. Poland

Data availability

Data on the Polish banking system are widely available. For the last seven years, disaggregated statistics of the largest banks in Poland are published in a yearly ranking by "Gazeta Bankowa". Obviously, the data given in that ranking are not completely reliable as they are supplied by the banks themselves. However, at least in recent years, the published figures are based on the final audited results, and as such can be viewed as highly reliable. As in other countries, the central bank is legally bound not to provide any data on individual banks, but some publications are useful, if taking into account that all operating banks are included and most of the rankings are incomplete. Additionally there are a number of existing professional journals such as "Bank", "Gazeta Bankowa", "Bank i Kredyt" and "Biuletyn Bankowy", and various Central Statistical Office (GUS) publications. Also, Banking Association publications provide some data on employment and cost levels in previous years. At the level of personal contacts, a limited amount of additional data and information may be obtained, but the level of disclosure is comparatively higher among foreign banks and foreign banks' branches.

Main Issues

Although the Polish banking has its roots in the eighteenth century, under the centrally planned system, institutions belonging to the Polish banking sector were liquidated or distorted. At the end of 1988, we could describe this system as a monobank - around 90% of credits for enterprises were granted by

the National Bank of Poland (NBP) which at the same time functioned as a central bank. In addition, there were three specialised banks serving external trade, and about 1600 small cooperative banks operating within the framework of the bank serving the agriculture sector (BGŻ).

In the 1980s, Powszechna Kasa Oszczędnościowa (PKO bp), the largest saving bank, was formally separated from the NBP structure. In January 1989, the nine regional operating branches of the NBP were reorganised into regional commercial banks with a relatively independent status. These nine banks inherited their technical structure from the NBP and were operated through the former branch offices of the NBP (each spun-off bank has around 40 branches). Later these banks started to open new branches outside their own regions.

In 1990, when conversion to the market economy began, **it was obvious that one of the most important elements of reform had to be structural changes in the financial system**. The new legislation permitted the establishment of private banks. Most new banks began their operation with the minimum required capital. The combined balance of all private banks at the end of 1990 was smaller than that of the smallest state-owned bank. By the end of January 1993 licences for undertaking banking activities had been issued to about 100 banks. Many of these have only one branch. On average, the profitability of the private banks was lower than that of the state-owned banks which serve large public-sector firms and had returns to scale advantages (see section 1.6). Before January 1991, the NBP also issued eight licences for the establishment of banks with foreign capital participation, and two licences to open branches of foreign banks. It was expected that this would motivate the domestic banks to achieve greater competitiveness, mostly in international activities. The most important problems at the time were bad debts and uncontrolled risk, together with the need for infrastructure development

(technical as well as human resources). The co-operative banks have also displayed financial weakness, and many of them went bankrupt or merged or been taken over in the course of the next few years.

The Polish banking sector of the late 1980s and early 1990s was characterised by five main features:

1. Structural underdevelopment;
2. High potential for future inter-bank competition due to the fragmentation of the former monobank network into a number of independent banks (Slay,1996);
3. High monopolisation, especially at the regional level (Stryjakiewicz and Potrzebowski, 1995)
4. Undercapitalisation and a lack of supervision over the subsector of smaller banks, leading to a number of scandals and liquidity disturbances;
5. Institutional overbanking.

In fact, most of these problems also plagued Hungary and the Czech Republic as well as other transforming economies. The way chosen by the first post-communist government to change the shape of the Polish banking sector was to allow more competition while enhancing the supervisory power of the NBP. With this objective in mind, the smallest state bank - the Export Development Bank (BRE) - was privatised in mid-1992. In April 1993, a large part of the shares of one of the "big nine" state banks - Wielkopolski Bank Kredytowy (WBK) - was successfully sold to the European Bank for Reconstruction and Development, Allied Irish Bank and other investors, with another tranche sold to private individuals. The simultaneous development of the other elements of the financial system, such as the stock exchange, an

insurance sector and the clearing system, permitted banks to operate in a wider and deeper environment. In such circumstances, a regulated and secure environment became more important. During the period 1992-1995, new supervision and prudential rules were implemented, the operation of state bank recapitalisation was undertaken (Montes-Negret and Papi, 1997), and a number of infrastructural improvements e.g. the establishment of a clearing house took place. The Polish government supported the state-owned banks by granting them 15 year maturity bonds worth a total of 1.2 bln USD. These bonds, used principally to increase reserve capital and to cover bad loans provisions, will subsequently be bought back by the Polish Bank Privatisation Fund based on money paid by foreign donors from developed countries to the Złoty Stabilisation Fund in 1990.

Ownership Structure

After seven years of reforms, the changes in the Polish banking system are evident. Overall, by the end of 1996 there were 79 commercial banks in Poland, 58 of which were predominantly domestically owned. in addition, there were 1463 cooperative banks operating within the regional structures.

However, banks with 100 percent state ownership (PKO, BH, PeKaO SA Group) or with major state participation (BGŻ - 64% of shares hold by state) still have the greatest share in the market. Other market leaders indude foreign banks like Citibank, ING, and BRE (with Commerzbank participation), as well as the other state-owned banks. The fastest growing banks include the foreign banks Creditanstalt, International Bank in Poland[6], and ABN-AMRO as well as the privatised banks as WBK, BŚ, BPH.

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6 In 1997 name changed to Credit Lyonnais Poland.

Table 1.2 Top Polish banks at the end of 1996 (bln USD)

Bank	*Assets*	*Statutory capital*	*Net Profits*	*Main shareholders*
PKO bp	12.69	0.32	0.36	State
PeKaO S.A.	8.42	0.32	0.08	State
Bank Handlowy	5.10	0.54	0.18	State[1]
BGŻ	4.18	0.47	0.17	State+Cooperative
PBG	3.75	0.07	0.04	State
PBK	3.21	0.20	0.08	State[1]
Bank Śląski	2.98	0.21	0.10	Foreign + Public
BPH	2.64	0.21	0.10	Foreign + Public +State
WBK	1.89	0.09	0.06	Foreign + Public
Bank Gdański	1.75	0.15	0.03	Public

Source: Gazeta Bankowa 16.06.1997. Converted into USD using NBP average exchange rate.
[1] Privatised in 1997.

Due to the systemic inheritance of the Polish banking sector state ownership is still dominant (Mortimer, 1995). While the state has progressively reduced its share, at the end of 1996 it still owned 30.6% of the capital in the commercial banking sector. NBP's stake amounts to another 7.9%, including shares acquired in a process of restructuring of 2 troubled banks (Prosper and PKB), as well as from its own capital (PBI). In 1996, direct and indirect capital participation by the state in the banking system amounted to 49.3% of the sector's total capital. Taking into account the high concentration of assets in this group, the share of state-owned banks in the total volume of assets amounted to 70.9%.

Table 1.3 Ownership structure of banks in Poland at the end of 1996 (by capital)

1. State Treasury	30.6%
2. National Bank of Poland	7.9%
3. State-owned enterprises	10.9%
4. Poiish private	8.5%
5. Communal	0.3%
6. Other Polish (including cooperative)	12.0%
7. Foreign Majority	25.1%
8. Foreign Minority	4.7%

Source: NBP data

Foreign Banks

Having steadily increased their share, by the end of 1996 foreign participants controlled around 30% of total banking sector capital. More than 25% of the total capital belongs to 23 banks in which foreign owners have a more than 51% share of capital. Additionally, around 40 foreign banks run representative offices in Warsaw, and 12 have established subsidiaries that only offer selected investment banking services and therefore do not require banking licences.

Foreign banks started to research the Polish banking market following the passage of the new Banking Act in 1989. Primarily, they established links with already existing banks by signing agreements concerning *nostro* accounts, overall co-operation, and so on. The new law legalised the operations of foreign banks in Poland. The two main licence application requirements were easy to fulfil and quite transparent:

1. Capital of at least 5 million ECU, from a documented source
2. At least one member of the Board with Polish citizenship.

As with other foreign companies that invested in Poland before the end of 1993, foreign banks were exempted from paying corporate tax for three years and could repatriate their profits. The first bank with a majority foreign shares operating in Poland was the American Bank in Poland (AmerBank), which began operating in 1989. In 1990, the Dutch NMB (now ING Bank) Bank was allowed to open a branch in Warsaw. In 1991, the first three banks with 100 percent foreign shares were licensed. These were: Citibank (USA), Creditanstalt and Raiffeisen Centrobank (both from Austria). In 1992 two other foreign banks and one branch of a foreign bank were authorised. This provided some competitive pressure in the sector, but the scope of foreign banks' activities was rather limited (Dobosiewicz, 1995).

A dramatic change of NBP licencing policy took place in late 1992. From this time until the second half of 1994, when Poland accomplished negotiations regarding foreign debt rescheduling, no further licences were granted. After 1994, licences started to be granted on an "implicit fee" basis - in exchange either for special services to the Polish economy or for helping a Polish bank which was threatened with bankruptcy. In September 1994, the partnership of Banque Nationale de Paris and Dresdner Bank received a licence. Dresdner Bank placed a significant amount of effort into negotiations on Polish external debt reconciliation and in this way was "rewarded" for its effort.

The NBP **policy was to encourage foreign banks to take over medium-sized Polish banks that were in trouble**. However, this only succeeded in the case of Interbank, which was taken over by ABN-AMRO. ABN purchased nearly 100 percent of Interbank shares for the sum of over 10 million USD. In pursuing this policy, the NBP tried to provide a "lifeboat" for other banks by taking part in negotiations leading to a take-over. In the case of Prosper Bank, when the negotiations eventually failed, the NBP itself took an extra majority of the shares. Foreign banks were not really interested in taking control of existing

banks that were in trouble. They preferred to "buy" the licence by investing some money in these banks, but not engage in restructuring and management of these unsuccessful banks. In line with this principle, in December 1994 Westdeutsche Landesbank agreed to buy 29% of the new issue of shares in Bank Morski, which was experiencing problems, at eight times the nominal price. in exchange for this, the NBP granted the German bank a licence in February 1995. A similar procedure was subsequently applied to other German banks. In return for a licence, they were forced either to support banks in trouble or to take over the "remainder" of almost bankrupt Polish banks.

Until to 1995 **the prevailing investment strategy was to establish a new bank from scratch or to participate in founding a bank with Polish partners.** The second most popular method of entry, measured by the amount of money invested, was participation in the privatisation of large state-owned banks. Additionally, a significant inflow of foreign capital took place through the Stock Exchange. This category is probably underestimated, as the security law only requires the public declaration of the possession of more than 5% of shares in any given company. Minor foreign investors in listed banks are not therefore recognised. However, this strategy is generally preferred by non-banking, portfolio investors.

The overall value of foreign banks' capital amounted to 576 mln PLN in 1995 and increased to 1312 mln PLN in 1996. During this period (Table 1.4), the main expansion occurred among German banks, which established a subsidiary, increased the capital of already existing subsidiaries, or invested in other banks. Representatives of banks from Holland and Austria increased their capital to a lesser degree, which caused their percentage share to decrease.

Table 1.4 Share (%) of foreign ownership in the Polish banking sector by origin

Country	*1995*	*1996*
Germany	17.2	28.5
Holland	33.2	18.3
USA	13	16.5
France	8.6	11.7
Austria	13.1	10.1
Ireland	3	3.5
Great Britain	5.1	3.4
Italy	1.7	0.8
Others	5.1	7.2

Source: GUS (1997)

Foreign banks focused their activity in the area of corporate finance, foreign trade transactions and large-scale financing (see Chapter 3). It is just in 1996 that some "car banks" like Ford and Opel Banks began operations in Poland, offering some retail services. Also the Lucky Goldstar group took over the midsize, Łódź based Petrobank[7], which is listed on the stock exchange. Other foreign banks also realised the potential of the retail market and began to offer some retail products either in cooperation with domestic banks or by acquiring domestic banks with a significant branch network. The demand for such banks from the side of foreign investors increased significantly over time from 1995. By the end of 1997, only a few mid-size banks remained in state or NBP hands and these were expected to be sold quickly as a whole. That caused each sale to be very controversial. Due to this, sales procedures last much longer than previously expected. For example, in the case of PBK the delays amounted to more than six months. However, at the end of the third quarter of 1997, after a number of privatisation transactions and capital increases, according to NBP data, the volume of foreign capital amounted to 39.8% of the

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7 Subsequently the name changed to LG Petrobank.

total banking sector capital, for the first time exceeding the state (31.6%) and private owners (25.4%).

Comparative analysis of financial performance

In 1995 total net profits in the banking system amounted to around 1.15 bln USD. By 1996 net profits were in the range of 1.9 bln USD and the level of costs, as measured by costs to revenue, stabilised in all banks except for foreign ones. Costs stabilised because a number of newly licensed banks had just commenced their activities and had to deal with start-up costs. However, in the previous year, 1995, the cost/income ratio in foreign banks was significantly lower than the same ratio in Polish banks (Table 1.5). The return on assets (ROA) value for the whole sector was slightly lower than the same value for banks with 100 percent foreign ownership. Hopefully, the number of banks with less than 2% ROA will continue to decrease. **Such results are the consequence in an increase of interest-based revenues and improvements in banks' portfolios due to a decrease in the level of provisioning.** The return on equity (ROE) indicator also displays high values: for the first six months of 1996, half of all banks (41) achieved a net ROE higher than 20%, with 18 attaining even higher than 40%, despite a 1996 inflation rate of 13.2%. The year 1996 was characterised by an increase in credit volume, especially in household credit. Between 1995 and 1997, household credit increased by 90%, with a nominal interest rate between 23 - 25%. This was mainly credit for car purchases and other forms of household consumption. By the end of 1996, more than 30% of Polish households held bank loans. This obviously underlines the potential of the retail market. 1996 was also characterised by 5.5% real growth in net bank assets. This high growth was achieved mainly by banks with purely foreign and private participation. Six out of the nine banks which emerged from the former NBP structure and the six so-called specialised banks stagnated. The highest

growth (45.7%) of total loans was achieved by cooperative banks. However, these banks only hold 5% of net banking assets. In addition, cooperative banks have been the subject of a major crisis in recent years. As a result, a number went bankrupt and some are still in danger. Overall, the volume of doubtful credits in ail banks was decreasing and was equal to around 15% of all credits. Similarly, the volume of non-paid credits diminished to around 5%.

The other characteristic feature in the balance sheet structure is a constant growth in the volume of securities. However, by 1996 this volume had decreased in the foreign banks and significantly increased in the cooperative and state-owned banks. Mirroring the underdeveloped capital market, most of these securities are treasury bonds and bills. They are characterised by high profitability as a result of inflation and the budget deficit. The volume of treasury bills in banks' portfolios is slowly increasing and currently amounts to 55% of all securities. The share of treasury bonds is decreasing and the volume of other securities (shares, other bonds) is still negligible (2.4%). Table 1.5 provides a more detailed comparison of foreign banks versus the entire banking system in Poland. Foreign banks engage around 40% of their assets in the interbank operations and trade finance. However, most foreign banks also strongly depend on the interbank market. Deposits in financial institutions averaged 10.6% of assets, while for 100 percent owned foreign banks the same ratio amounted to 32.8%. Polish banks are significant players on the capital market. They own 80% of licensed brokerage firms, although these brokerage firms are separated from the banks structure. Most foreign banks already established or are due to establish their own brokerage firms.

Thirteen banks are quoted on the Warsaw Stock Exchange (WSE). Quoted banks hold approximately 20% of banking sector assets and their capitalisation amounts to around 3.1 bin USD, or 39% of total WSE capitalisation. This levei, which increased even more after the Bank Handlowy

(BH) privatisation in mid-1997, contributes to a perception of the WSE being heavily overweighted towards the banking sector. Banks privatised by public offer are in relatively good shape. New offers are also in the pipeline, including shares of state-owned banks as well as other private institutions.

As in Table 1.5, another appealing distinction of foreign banks is their low level of fixed assets in total asset volume. This is caused by the low number of branches of these banks outside Warsaw. In most cases, banks' premises are rented and therefore contribute to operating costs. Some banks (as Creditanstalt, ING and LG Petrobank) recently engaged in the development of headquarter buildings which in future might lead to an increase of fixed assets/total assets ratio and a decrease in operating costs.

Table 1.5 Foreign banks versus the entire banking sector in Poland

	1995	*1996*
Share of foreign banks' tier I capital	17.96%	27.69%
Foreign banks' share of profits	34.5%	13.3%
Assets in banks with majority foreign ownership	12%	13.6%
Credits in banks with majority foreign ownership	13.9%	14.9%
Deposits in banks with majority foreign ownership	10.7%	12%
Average ROE (all)	25.8%[1]	30.2%
Average ROE of banks with majority foreign ownership	42.8%[1]	19.4%
Average ROA (all)	1.98%[1]	2.58%
Average ROA of banks with majority foreign ownership	5.72%[1]	2.66%
Average cost/income ratio (all)	50.5%	50.6%
Average cost/income ratio of banks with majority foreign ownership	42.8%	50.1%
Average fixed assets/assets (all)	3%	2.8%
Average fixed assets/assets in banks with 100 percent foreign ownership	1.9%	1.3%

Source: Author's calculations based on GUS (1997)

[1] Based on end-year level of assets/equity

In 1996, banks' gross capital funds increased in real terms by around 20%, as compared to 11% in 1995. The increase is most evident among foreign banks, at 51.3%. If we take into account the simultaneous 46% increase in the assets of this group, we may conclude that their expansion, even if based on capital already in place, was bound to occur since there is still capacity in their balance sheets to accommodate even larger volumes of lending. Fifty nine banks have capital in excess of 5 million ecu, and only four below 2 millon ecu. According to the Banking Supervision Office (an integral part of the NBP) by mid-1996, 9 out of 73 obliged banks did not fulfil the required 8% Cook ratio for capital adequacy. Institutions that do not fulfil the capital adequacy requirement are often subjected to mergers and acquisitions by other banks. On the other hand, many Polish banks hold their indicators well above the required ones, which makes them ready for further asset expansion.

Although Polish banks are large relative to EE standards, in comparison with other European institutions they are relatively small (Bonin and Leven, 1996). Obviously, the volume of share capital is related to the level of economic development of a given country. A direct comparison of the nominal value of assets is not, therefore, very informative. More accurate information can be obtained by comparing assets and capital to GDP. In the early 1990s the total value of banking assets did not exceed 50% of GDP. In 1992 it was equal to 48%, while only in 1996 it was just over 55%. Such a comparison once again underlines the under-capitalisation of the Polish banking system.

This situation should improve with strong economic growth of 5.5% in 1995, 6% in 1996 and 6.9% in 1997. The increase of the scope of financial intermediation in relation to GDP is frequently observed in rapidly growing economies. For example, at the end of the 1960s, similar indicators for France, Spain, Portugal and the UK varied between 40-60%, while currently they are equal to 140%, 120%, 130% and 200% of GDP respectively.

In this context, after the privatisation of three of the nine banks which emerged from the NBP structure, the Ministry of Finance began a debate on future privatisation processes in the Polish banking sector. One of the key questions is whether state-owned banks should be consolidated before privatisation, in order to increase their competitiveness, or whether should they be sold individually.

In October 1996, the Polish Parliament approved a **Consolidation Act** which allows for the formation of state-owned banking groups with the aim of withstanding foreign competition and improving efficiency. By the end of 1996 two bank groups were created under this Act. The first was the merger of Bank Polska Kasa Opieki (PeKaO SA), which possesses a countrywide network of 135 branches, with three regional banks: Powszechny Bank Gospodarczy (PBG) from Łódź, Bank Depozytowo-Kredytowy (BDK) from Lublin, and Pomorski Bank Kredytowy (PBKS) from Szczecin. Each of these banks has about 50 branches concentrated in their respective regions. A second and much smaller group was created in October 1996 by granting almost 33% of the shares of Polski Bank Rozwoju (PBR), a Warsaw investment oriented bank, to Powszechny Bank Kredytowy, also a Warsaw based bank with 62 branches. The results of these operations will be discussed in detail in Chapter 4.

Comparison of the financial results achieved by banks in the 1990s' proves that after 1994 although the level of costs is still high by international standards a significant improvement took place. The worst results were listed in 1992 and 1993. They were caused by an increase in operating costs due to the introduction of prudential regulations requiring high provisions against doubtful and bad loans. **The main reasons for the improvement in the Polish banking system results after 1994 were:**

1. An overall improvement in the economic situation,
2. Successful restructuring and a clearing out of bad debts,

3. Privatisation and consolidation of banks,
4. A gradual permission of foreign entry.

1.3.2. Hungary

Data availability

The level of data availability is satisfactory, although much is not translated from Hungarian (professional journals "Bank&Tozsde" and "Figyelo"). Disaggregated data for banks are published in the "Hungarian Financial and Stock Exchange Almanac", an English language version has been published for the past six years with the participation of the main financial institutions. Individual banks' data have been used by other researchers, such as Vittas and Neal (1992), Sabi (1996), and to some extent Grahl (1996). Although Hungarian Banking Association publications remain rare, the NBH prints a useful series of working papers and monthly and yearly reports. The Annual Report of Hungarian Banking and Capital Market Supervision is also a very good source of data. The NBH, the Ministry of Finance and Banking and Capital Supervision officials are accessible and keen to provide aggregate data, which however lack of a clear division between foreign-dominated and domestic banks' results. The level of disclosure is comparatively low, so much of this data may be obtained on the basis of personal contacts as well as on written request.

Main Issues

Until 1948 the Hungarian banking system functioned along market lines. After this date, banks were nationalised and the monobanking model adopted. For decades after nationalisation, there were periodic reorganisations of the system, but basically it remained the same.

Banking reform commenced in Hungary much earlier than in the other EE countries. Even before the introduction of the two-tier structure, other institutions apart from the National Bank of Hungary (NBH) existed in the Hungarian banking sector. As in the other EE countries, deposit collection was allocated to the National Savings Bank (OTP), while foreign trade operations were concentrated within the Foreign Trade Bank (MKB). Apart from this, in 1979 the Central European International Bank (CiB) was created with 34% of shares held by the NBH and 66% held by six foreign banks. Just before the creation of the two-tier system in 1987, two other foreign banks - Citibank and Unicbank - were licensed for operation. But these banks only had a limited scope of activity, as lending to Hungarian enterprises continued to be the exclusive right of the NBH.

The 1987 reform created three new banks on the basis of the NBH infrastructure: the Commercial and Credit Bank (K&H), the Budapest Bank (BB) and the Hungarian Credit Bank (MHB). Their portfolio was carved out on a sectoral basis. The K&H bank inherited a portfolio of the agroindustry sector, Budapest Bank mining and heavy industry, while MHB received the chemical and machinery industry (Buch, 1996b). Next year, two new joint venture banks were authorised, Interbank and Postbank. The number of private and foreign banking institutions continued to increase during the following years, reaching 36 banks at the end of 1991.

Apart from creating a real two-tier banking system in 1987, the basic regulatory and supervisory framework was established. However, as Vittas and Neal (1992) mention, the banking system continued to suffer from problems inherited from the old regime and has also been affected by the difficulties experienced by the Hungarian economy during its transition to a market-oriented system. Additionally, some activity barriers existed: commercial banks were prohibited from taking deposits from individuals, and limits on the opening of new

branches and on interest rates persisted. The development of the Hungarian banking sector was rather slow. Between 1987 and 1990 the volume of total assets of commercial banks increased by 61% while the cumulative rate of CPI for the same period was 75%.

From December 1991 the new Banking Act introduced fresh regulations that paved the way for further developments within the banking sector. This legislation adopted the Basle Agreement of an 8% capital adequacy ratio, restricted the National Bank of Hungary's financing of the budget deficit, and mandated a reduction of the state's ownership share in banks to 25% by 1997. Additionally, differently than in most transforming countries, the Act distinguished between commercial banks and the "specialised financial institutions" i.e. investment and savings banks (Grahl, 1996). Another difference was that the Banking Supervision Office was established as a separate institution overseen partially by the Ministry of Finance and partially by the Prime Minister directly. Later this office was merged with the State Securities and Exchange Commission, forming the unified Hungarian Banking and Capital Market Supervision office. Simultaneously, a new bankruptcy law was introduced, allowing banks to take part in the privatisation of enterprises (Sabi, 1996). Hungary was also the first country in the region to introduce an explicit deposit insurance scheme, in June 1993. In the meantime, the common problem of bad debts emerged. Two waves of the "Loan Consolidation"[8] process took place, in 1992-93 and 1993-94 (Balassa, 1996; Chudzik, 1995). A mix of techniques were in use, but in general these programmes were less consistent than the Polish or even the Czech case, leaving possibility for moral hazard and "gambling for resurrection" behaviour.

At the end of 1994, there were 45 banks operating in Hungary. The major cause of the increase in this number from 1987 must be attributed to

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[8] The word "consolidation" in Hungarian circumstances relates to coping with the bad debt problem, while in Polish it relates to the wave of mergers between banks.

the entry of new foreign banks. According to Sabi (1996), at the end of 1989 foreign and joint-venture banks had 3.8% of the total banking assets in Hungary, with their share increasing to 15% by 1992. Bonin and Leven (1996) state[9] that foreign banks had an 18.1% market share in Hungary at the end of 1994 compared to 15.5% at the end of 1993[10]. The state simultaneously retained 47% of the total capital of commercial banks, compared with a foreign share of about 30% in 1993 (Bonin and Leven, 1996).

In the period 1992 - 1995 a number of changes took place in banks' regulatory and institutional environment. A deposit insurance system was introduced in 1993, supervisory activities were tightened, and the clearing system improved. The main question of bad debts still remained, because a series of bank recapitalisations failed to achieve the desired effects. However, in one respect they did achieve something positive: they broke the ownership links between state-owned enterprises and banks, thus allowing for the later sale of banks' shares to strategic investors. In fact, because of this large new domestic banks did not emerge in Hungary. After a short period at the start of reform, enterprises were banned from investing in the financial sector. In contrast, successful, large private banks in Poland which were primarily based on state corporate capital later "emancipated" themselves, becoming fully privately owned banks[11].

A change of strategy with regard to the banking sector took place under the left-wing government of Gyula Horn that came into power in May 1994. The new **government decided to sell the state's shares in the banks**, and this strategy was consequently implemented from 1995 onwards (Borish *at al.*, 1997). One can say that by selling banks, the problem of bad debt was also sold to the new owners. However, at least in the case of the sale of Budapest

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9 However, they do not explain what kind of measure was used.

10 This numbers are similar to those for France (18.2%) and Switzerland (12.2%) in 1985. For more extensive data compare Gardener and Molyneux (1990).

11 For example, BIG Bank and Kredyt Bank.

Bank to GE Capital, guarantees for certain groups of loans were issued, and consequently after the transaction the Ministry of Finance repurchased a number of defaulted debts. Moreover, it is said that value of these debts already exceeded the sum paid for Budapest Bank by foreign investors. This can be explained by the number of peculiarities and the political reasoning surrounding this transaction. In the case of other banks, these experiences were taken into account and it can be said that **the task of coping with a significant volume of bad debts was successfully passed onto new owners.** Additionally, during 1996-1997 a set of changes in regulations as well as some new regulations (for example regarding the mortgage market) were due to be introduced or were at least at an advanced stage of the legislative process. Since January 1, 1997, banking sector operations have been regulated by the Act on Credit Institutions, through which Hungarian regulations converged closely with EU rules.

Ownership structure

At the end of 1996, there were 41 commercial banks in Hungary, out of which 8 belonged to the category of specialised financial institutions and one was an investment bank. in addition, there were 247 saving co-operatives, 7 credit co-operatives and one saving bank. **Over the period 1991-1996, domestic ownership in share capital diminished from 78.4% to 47.55%.** These changes of ownership took place in two steps. First, during 1991-1994 domestic corporate ownership was reduced from 37.7% to 15.1%, mostly through the increase of state ownership. Under inflationary circumstances, this did not necessarily mean that the nominal value of Hungarian companies' involvement in banking diminished. This was in fact true only in some cases. Secondly, from 1994 to 1996 the volume of domestic ownership diminished from 83.5% to 47.55%, while the foreign share in capital increased from 16% to 49.2%[12]. Only two banks are listed on the Stock

Exchange, OTP with a free float ranging about 500 million USD and Inter-Europa Bank with a free float in the range of 50 million USD. The Budapest Stock Exchange is perceived therefore to be underweighted in terms of bank participation.

The Hungarian banking market remains highly concentrated, especially in retail services. At the end of 1996 OTP, the main savings bank, continued to account for 78% of total extended retail loans. In the area of corporate banking, business is distributed more evenly with smaller and medium sized banks expanding their market share. The same relates to the interbank and forex markets. Therefore, one may conclude that banking sector liberalisation mostly benefits large corporations, while the retail market became a target of activities later, when the market expansion opportunities for corporate services are exhausted (compare Chapter 3).

Table 1.6 Top Hungarian banks at the end of 1996 (bln USD)

Bank	*Assets*	*Statutory capital*	*Net Profits*	*Main shareholders*
OTP Bank	7.61	0.31	0.060	State + Public
Postabank	2.29	0.12	0.000	State + Foreign
K&H Bank	2.18	0.10	0.016	State
MKB Bank	2.11	0.18	0.045	Foreign
MHB Bank	1.52	0.07	0.018	Foreign
Budapest Bank	1.36	0.17	0.031	Foreign
CIB	1.05	0.14	0.026	Foreign + State (NBH)
CIB Hungaria	0.82	0.11	0.030	Foreign
Creditanstalt	0.70	0.07	0.015	Foreign
Unicbank	0.66	0.08	0.036	Foreign

Source: Clark (1997) and Hungarian Financial and Stock Exchange Almanac 1995-1996. Converted into USD using NBH average exchange rate

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12 Foreign participation exceeded 50% shortly after the beginning of 1997.

Foreign banks

As mentioned above the first foreign banks emerged in Hungary in the mid-80s. At that time, they were supplementing the existing system rather than directly competing with domestic banks, as apart from the National Bank there were not many of these. By 1992-3 all the interested foreign banks had already located in Hungary, and only later started to look for new business opportunities apart from corporate and trade financing (see survey results in Chapter 3). Among the leaders were banks that have a strong presence in other countries of the region, such as Citibank, Creditanstalt, Raiffeisen and ING, but also banks that did not enter other EE countries. The Italian Gruppo Bancario San Paolo, Cariplo, and the Japanese Sakura Bank established their presence through subsidiaries or joint venture banks. Unlike in the other examined EE countries no foreign branches existed and there were no official plans to allow them in the foreseeable future, despite official obligations linked with OECD membership.

The political changes of 1994 resulted, among other things, in the decision to open the domestic banking sector wider for foreign investment. In the first instance, the well-standing MKB Bank was sold in two tranches to the German Bayerische Landesbank (see section 3.4.1). Later two other large banks - Budapest Bank and MHB Bank - were sold to GE Capital and ABN Amro respectively. A number of smaller, less conventional deals also took place, such as the sale of some of Dunabank's lines of business to ING Bank.

In 1996, **25 of the 41 banks operating in Hungary were classified by the NBH as foreign-owned**. By mid-1997 of the large banks, only K&H Bank remained in state hands, but the tender process for its sale was already in place, with two foreign bidders remaining - Krediet Bank from Belgium and Bank of Ireland. After this transaction the state will only retain its shares in the Development and Investment Bank and in a few smaller banks that are also

due to be privatised. It was also planned that a 25% stake in the saving bank OTP would be left under government control, but the successful privatisation of other banks as well as budgetary tension caused even this decision to be revoked. Also, from July 1, 1996 it was no longer necessary to obtain the preliminary permission of the State Supervision for the acquisition of holdings in a banks in excess of 10%. The threshold of 15% is still applied but such a holding is allowed only for other credit institutions, insurance or investment companies or state agents.

Table 1.7 Evolution of the foreign banks in Hungary

	1991	*1993*	*1996*
Number of foreign banks	11	18	25
Capital of foreign banks in total banking sector capital	15.78%	12.44%	49.22%

Source: NBH data

By mid-1997 Hungary was the first EE country in which **foreign capital share value exceeded half of the total capital of the sector.** Although it is too early to judge the full benefits and disadvantages linked with this fact, it must be said that significant complaints against foreign owners were not noted during interviews with Hungarian officials and researchers. The future conduct of these banks will be subject to close scrutiny by all Hungarian authorities as well as by other EE countries. In the meantime, the identification of the reasons for entry, major obstacles and strategies remains an considerable research task.

Comparative analysis of financial performance

In 1995, the net profits of the Hungarian banking system amounted to around 300 million USD (Table 1.8), while in 1996 they increased to around

425 million USD (gross profits were 385 million USD and 530 million USD respectively). Most of the growth in net profits for the period 1995-96 was caused by the reduction of costs associated with the resolution of non-performing assets, i.e. a lower level of provision-making, mostly among domestic banks.

Table 1.8 Comparative results of Hungarian banks

	Net profits (mln USD)			ROA		ROE	
Year	*1994*	*1995*	*1996*	*1995*	*1996*	*1995*	*1996*
Banks established originally with foreign majority	140	215	190	5.2	3.7	44.6	31.1
Other banks	25	85	235	0.8	1.6	12.4	20.8

Source: Author's calculations based on Hungarian Banking and Capital Market Supervision Annual Report 1996.

Vittas and Neal (1992) provide a useful review of Hungarian banks' performance for the years 1987-1990. For that period, they found constrained competition between the banks, and segmentation between large and smaller, faster growing, joint-venture banks. The profitability of banks was significantly affected by the size of nonperforming debts. In a more recent study, Sabi (1996) addressed the problem of performance of foreign versus domestic banks in Hungary during the period 1992-1993. After calculating a number of ratios and using simple statistical tests, he concluded that "the results [..] indicate 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" (p.187). However, his analysis focuses on profitability measures. These measures, partially due to the inherited bad debt situation but also for other reasons, seem not to be appropriate for such an exercise. After coping with these problems, domestic banks can successfully

compete with foreign banks at least in term of profit making (see Table 1.8). Moreover, none of the ratios involving cost structures has been calculated. Additionally this approach, which seems to be to some extent justified by the scarcity of the data, creates some interpretation problems as pointed by Vittas (1991). The attempt to work out a more appropriate approach, based on balance sheet measures, is made in Section 1.6. .

1.3.3. The Czech Republic

Data availability

In contrast to Poland and Hungary, the scope and quality of publicly available data on the Czech banking system are relatively poor. The disaggregated data that were published for the first time in 1996, in "Hospodarske Noviny" are, to the author's knowledge, of poor quality. Even the content of the reports of banks listed on Stock Exchange is left to the discretion of the company, and these reports usually provide just few items. Only the publications by Matousek (1996 and 1997) use disaggregated data, but their author seems to be a Czech National Bank (CNB) insider. Additionally, the interviewed officials were reluctant to provide any hard data, and their attitude was characterised by a high level of suspicion. The best example of this was an interview with one of the highest ranking officers in one of the Czech banks, who was either unable or unwilling to state who currently owned the bank. Aggregated data published by the CNB and other authorities should be treated with caution, as in most cases they exclude a number of entities, in most instances Konsolidacni Banka. Although the Banking Association seems to a play more significant role as a pressure group than the similar organisations in Hungary or Poland, it is not very helpful and their publications have a poor value for the researcher.

Main issues

As in Poland and Hungary, during the communist era the Czechoslovak banking system consisted of the State Bank of Czechoslovakia, which performed most deposit and lending operations, and five specialised banks. Ceska Sporitelna and Zivnostenska Banka focused on retail activities, dealing respectively with domestic and foreign currency savings. Foreign trade was serviced by Ceskoslovenska Obchodni Banka (CSOB), and long-term financing by Investicni a Postovni Bank (IPB). However, Czechoslovak banks exercised a comparatively stronger position over the corporate sector. Loans to industry in 1989 comprised 70% of GDP in Czechoslovakia, as compared to 50% in Hungary and 30% in Poland (Desai, 1995).

In 1989, the newly created Komercni Banka received almost 60% of the State Bank's assets, while in 1990 the first new private banks were licensed (Merrill Lynch, 1997). However, the issues surrounding banking became more complicated because of two facts: the split of the former Czechoslovakia and the voucher privatisation procedure. **The separation of Slovakia complicated the ownership structure of the major banks**. For example, CSOB remains 25% owned by the Slovakian state, which obviously influences any decisions over ownership changes. Secondly, some large banks emerged as major players in the establishment and management of investment funds, which were created as a vehicle for the aggregation of vouchers issued in the mass privatisation programme. **Close links of banks with major companies** resulted from this situation, and coupled with a diluted ownership pattern, caused a suppression of competition. Most of the largest domestic corporations have a representative of the holding bank on the managing board, which obviously can make it more difficult for other banks to establish new client relationships with these firms. In fact, according to Zahradnik (1997), "[t]he influence of Czech banks on the management of Czech companies is enormous and the rate of

mutual relationship is close to Japanese or Korean standards" (p.41). Moreover, the three largest banks (Ceska Sporitelna, Komercni Banka, IBP) were included in the voucher privatisation programme themselves. This eventually created an unclear, complicated structure of indirect cross ownership in which banks were often lending to unrestructured and uncompetitive companies (Kenway and Klvacova, 1996). In this situation, the state remained the most influential shareholder, although the largest banks were floated on domestic and foreign stock exchanges[13].

In March 1991, **Konsolidacni Banka was created to assist in bank restructuring.** In the first half of the same year it took over 110 bln CZK (aprox. 4 billion USD) of the 180 bln CZK worth of troubled revolving credits from the major banks (ING Barings, 1996). Despite efforts to reduce bad debt and improve portfolio quality, troubled credits contributed severely to the significant problems encountered by the majority of Czech banks in the 1990s. Newly established banks adopted a strategy of quick balance sheet growth. As the large firms were served by state banks, new banks turned to smaller start-up firms, and other, often very risky businesses. On the other hand, the mechanism of state bank restructuring was too liberal and introduced with unjustified delay (Chudzik, 1995) and it did not eliminate the banks' tendency to invest new funds in insolvent debtors. As the progress of privatisation in the banking sector was in fact stalled after the voucher scheme took place, further waves of write-offs at the public expense were found to be unavoidable.

A crisis emerged in mid-1994 when three minor banks failed. Factors contributing directly to this crisis included lax supervision, low auditing and reporting standards, and criminal activities of certain entities. The scope of supervision of the Czech National Bank (CNB) was weak, with only 74 people overseeing all commercial bank activities at the end of 1995 (Merrill Lynch,

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13 Through Global Depository Rights.

1997). The full crisis emerged in June 1996, prompted by the failure of the mid-size Kreditna Banka. This failure had a particularly high profile as it was accompanied by the arrest of the directors of Motoinvest, a controversial Czech investment company, on charges related to the bank's collapse and also by counter-allegations of the involvement of politicians and officials in the collapse (ING Barings, 1996). Motoinvest was also a shareholder in Agrobanka, a bank founded in 1990 that had become the fifth-largest Czech bank and which threatened to takeover Ceska Sporitelna. Finally, the CNB stepped in and took control of the Agrobanka. Coupling this with a currency crisis that occurred at about the same time, the reputation of the banking sector was severely undermined. In the first half of 1997, the volume of deposits decreased by 6% in real terms and this, together with an increase of reserve requirements, considerably affected banks' financial results.

Even before the crisis fully emerged, the CNB introduced a number of measures that were intended to stabilise the situation, although the general laissez-faire attitude of the liberal government mitigated these efforts. Tougher capital requirements and prudential regulations were introduced. A Deposit Insurance Scheme was established, but for political reasons most depositors in the failed banks were fully compensated, partially with funds from budgetary resources. The CNB also supported consolidation within the smaller bank sector, lead by two regional banks - Union Banka of Ostrava and Foresbanka of Żlin.

In July 1997, after crisis had stabilised, the Cabinet approved an amendment to the Banking Act to tighten regulations and **allow the CNB to conduct its supervisory functions properly**. Apart from increasing the maximum compensation from the Deposit Insurance Fund, these amendments focused on cutting ownership links between banks and companies. Once introduced, these measures, should over time force banks to reduce their exposure to equities gradually and comply with other prudential limits.

Simultaneously, other reforms took place in the financial sector, especially regarding capital markets. However, still there are no clear plans for tackling bad debt probiems that in the meantime have grown to 40% of total credit volume. It must be noted that this high figure excludes Konsolidacni Banka assets, which itself poses another unresolved issue.

Ownership structure

Although **at the end of 1996 there were 53 banks[14] operating in the Czech Republic**, the sector remains highly concentrated. The assets of the large banks[15] amounted to more than 70% of total assets in the banking sector, while their capital totals more than 50% of total capital (Czech National Bank, 1996). This concentration was further enchanced by bank failures. State ownership in banks varies from 100% (Konsolidacni Banka) to around 30% (IBP). In fact, apart from the "real" Zivnostenska Banka privatisation in 1992, the state effectively retained control over all other banks. The state held 31% of the capital of the banking sector, while this was complemented by 45% of non-state domestic ownership, mostly in form of investment funds holdings. Taking into account several links between bank managers and poiiticians, actual insider control of banks was in place, with all the disadvantages of such a situation including lax cost control and moral hazard problems. Additionally, a **fundamental conflict of interest in banks' dual roles as equity investors and lenders emerged**. Due to these circumstances, a high level of provisioning against doubtful debts was necessary, which in turn affected bank profitability. Average ROA declined from 0.48% in 1994 to 0.09% in 1995, whiie ROE dropped over the same period from 14.02% to 2.49%. Later in 1996, both measures contracted to 0.27% and 8.15% respectively. It is expected however, that because of the high level of write-offs, ROE will stay below 5% until the year

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14 Including nine foreign banks' branches.

15 Ceska Sporitelna, CSOB, Komercni, IBP and Konsolidacni Banka.

2001 (Merrill Lynch, 1997). Average operating costs per employee continued to grow, increasing from 452,000 CZK at the end of 1994 to 660,000 CZK by the end of 1996.

Table 1.9 Top Czech banks in 1996 (bln USD)

Bank	*Assets*[1]	*Statutory capital*	*Net Profits*[2]	*Main shareholders*
Komercni Banka	15.8	0.35	0.194	State + Public
Ceska Sporitielna	13.1	0.28	0.051	State + Public
IBP	8.4	0.21	0.132	State + Public
CSOB	7.2	0.19	0.102	State (CNB) + Slovakia
Konsolidacni Banka	4.4	0.22	n.a.	State
Agrobanka	2.5	0.16	0.011	n.a.
Zivnostenska Banka	1.2	0.06	0.015	Foreign + Public
Vereinsbank	1.2	0.05	n.a.	Foreign
Societe Generale	1.1	0.03	0.007	Foreign
Citibank	0.9	0.05	0.018	Foreign

Source: Hospodarske Noviny - various issues, Merrill Lynch (1997), author's calculations. Converted into USD using CNB average exchange rate

[1] As at 30.09.1996

[2] In 1995

In view of the overall economic deterioration and budgetary pressure, by mid-1997 **the government announced its desire to sell its remaining stake in all major banks**. It was decided that the privatisation of IBP would proceed first. Additionally, plans to merge Ceska Sporitelna with CSOB were underway, but this later failed, for among other reasons Slovak shareholders' opposition. The Czech government expects to raise around 2 billion USD from the sale of their shares. However, the first transaction of the sale of IBP to Nomura was stalled because of the political turmoil and other controversies surrounding the set-up of the whole transaction and later

proceeded with mixed results. Taking into account all of these facts, any significant changes in the ownership structure of the Czech banking sector cannot be expected before late 1999. Banking sector structure and performance is likely to be a severe impediment during Czech accession negotiations with the European Union.

Foreign banks

By the end of 1996, out of 53 banks operating in the Czech Republic 13 were treated as foreign owned banks and 9 operated as branches of a foreign bank. However, total foreign capital, excluding Slovakian shares in CSOB and other smaller banks, amounted to no more than 20% of the total capital in the sector. Moreover, assets of wholly foreign banks amounted to around 8% of assets in the sector.

Table 1.10 Foreign banks in the Czech banking system

	1991	1993	1996
Foreign banks	4	11	13
Branches of foreign banks	0	7	9

Source: Czech National Bank (1996)

The most significant number of foreign entries took place between 1991 and 1993 (Table 1.10). Several of the key regional players established their presence over this period either in form of a fully-owned subsidiary or a bank branch. **The Czech Republic was the only country of those in the region that allowed a significant presence of foreign branches.** For more than two years after the end of 1993, a "moratorium" was applied to the licensing of foreign banks. This was officially motivated by the desire to give "breathing space" so that domestic banks could consolidate and restructure (Mervart,

1996). In fact, this policy was intended to force foreign investors to take over troubled banks in order to acquire a banking licence. This policy largely failed because foreign banks refused to be involved in and was subsequently replaced by a policy of encouraging domestic banks to make such takeovers. Only in few cases (Interbank, Hana Bank) did minority or joint-venture foreign investors emerge.

In 1996, two new licences were granted. One was issued for the first British bank in the region: Midland Bank opened a branch in Prague. According to a number of insiders, the political and economical turmoil that emerged in 1997 caused the "waiting list" to be significantly shortened. Actually, these two licences were given to the only viable investors remaining. Further involvement of foreign banks is grossly delimited by the lack of privatisation prospects for the large banks, as well as by the overall economic deterioration. Although the general FDI inflow to date is comparatively large, it will be also affected, and by this contribute to a worsening of the position of foreign banks, which traditionally serviced inward FDI.

Comparative analysis of financial performance

Foreign banks in the Czech Republic are characterised on average by an approximately 50% lower value of capital than domestic banks, coupled with a 50% lower value of average assets (Table 1.11). However, the average volume of assets in foreign banks more than doubled over the period 1994-1996, while it almost stagnated in large, state-owned banks. The results of foreign banks are better than the sectoral average. In terms of asset structure, the share of credits in foreign banks' balance sheets is slightly lower than in large domestic banks, as is the share of tradable securities. On the liabilities side, foreign banks depend heavily on interbank markets, having a much lower lever of clients' deposits in their portfolios. This underlines the **corporate-oriented approach of**

foreign banks. Recently, a number of foreign banks increased their capital in order to position themselves for further growth. A more detailed comparison of banks' results is hindered by data availability.

Table 1.11 Comparative data on foreign banks in the Czech Republic

	Average assets in 1996 (mln USD)	Average capital in 1996 (mln USD)	ROA		ROE	
			1994	*1995*	*1994*	*1995*
All banks	1406	48	0.48	0.09	14.02	2.49
Foreign banks[1]	696	32	0.8	1.1	7.8	10.5

Source: Author's calculations based on Czech National Bank (1996)
[1]ROA and ROE - unweighted averages

1.4. Comparative analysis of the countries' banking systems

The banking sectors in Poland, Hungary and the Czech Republic entered the transformation period with a number of similarities. However, each of these countries had its own course of sector development. **The most significant factors contributing to the different scenarios in each sector were:**

1. The attitude towards new entry, particularly of foreign banks;
2. Methods of dealing with the bad debt problem;
3. Speed and means of bank privatisation;
4. Reforms in the regulatory environment;
5. The overall level of financial intermediation.

Table 1.12 provides selected comparative data on the banking systems in these three countries. **Poland adopted a relatively liberal attitude towards new entries** (especially in the period 1990-1992), privatised a number of state-owned banks with a significant usage of the stock exchange, and

applied moderate measures against foreign competition. After a long period of bad debt bailout, **Hungary decided to privatise its banks**, mostly by sale to strategic foreign investors without listing. In the other extreme, the **Czech Republic floated only parts of its banks' shares on stock exchange, while the state actually retained control.** One can say that the selected approach to privatisation significantly affected the outcome of financial restructuring of the bad debt legacy. Hungary overcame these difficulties generally by passing remaining debts to new owners. In Poland, restructured banks were in most cases sold, while in the Czech Republic bad debt problems still persist. The recommended sequence would therefore be to restructure banks and then sell them as quickly as possible in order to avoid further bail-outs. By doing this quickly, some additional objectives, such as a strong presence of domestic investors, can be achieved. In contrast, prolonged restructurisation under state ownership does not allow for domestic private capital formation in the sector, thus leaving banks open to foreign investors. In such a process the role of the stock exchange remains very crucial, as it is not only a useful tool in the valuation of banks, but it also allows banks to undertake a more flexible approach during investment negotiations.

Only in the case of the Czech Republic does the level of sector assets/GDP appear to be at par with EU standards. Once again, this underlines the magnitude of the bad debt problems in the Czech case, but it also provides an idea of expansion possibilities for further investments in other countries of the region. As the Hungarian banking system is perceived to be already equally well developed in all respects, future investments might be expected from all types of banks. In the Polish case, there appears to be an imbalance between the quality and level of corporate versus retail services. Therefore, substantial development in the area of the retail market in Poland should be expected.

Table 1.12 Comparative data on banking systems

	Poland	*Czech Rep.*	*Hungary*
Number of commercial banks[1]	79	53	41
Share of foreign capital	27.7%	24.12%	49.22%
Share of state capital	49.3%	31%[2]	33.17%
Foreign banks branches	3	9	0
Average capital adequacy ratio	n.a.	10.32%	15.18%
Share of largest 3 banks in total assets (1995)	39.3%	50.8%	36.9%
As above in 1993	*42.4%*	*65.1%*	*46.4%*
Level of non-performing loans in total loans (1995)	19.6%	24.3%	12%
Number of banks listed at Stock Exchange	13	4	2
Total Assets of system in bln USD (1994)	49.8	53.7	27.3
Total sector assets/GDP (1995)	57%	69%	54%

Source: Czech National Bank (1996), NBP and NBH data. Data as at the end of 1996, if not stated otherwise,

[1]Excluding cooperative banks

[2]Excluding indirect ownership

1.5. Sectoral outlook and tendencies

It should be noted that after the banking crises of the early 1990s, in general **the EE banking systems became secure and the majority of large banks are now trustworthy**. A number of them have been classified by rating agencies and received comparatively good results, in some cases equal to the country grades. However, the EE banking systems display several features that create serious problems in the run up to EU entry. Apart from the slow adjustment of regulations to EU standards, some of the most important characteristics of EE banks still differ significantly from those in the EU. These are:

- low capital adequacy linked with a low level of capitalisation;
- low efficiency;
- technological underdevelopment; and
- a lack of a client-oriented approach.

Eastern Europe offers a potentially huge **market for banking technology**. The number of ATMs (especially in Poland), computer systems and other advanced technologies in use is relatively low and those that exist are often obsolete. This contributes to high employment costs, as many standard procedures are still performed manually. Obviously, the use of advanced technologies is severely restricted by a lag in telecommunications and other sectors. The clearing systems were reformed but still the number of transactions served by electronic systems is relatively small. Due to this situation, foreign banks were able to attract a significant number of corporate customers by offering them fast and efficient domestic and especially foreign payment services associated with on-line banking systems. Technological underdevelopment is also a major obstacle to the introduction of large scale credit and payment card services. For example, in Poland the number of cards issued by the end of 1996 did not exceed 500,000, although is growing very fast. Most of the acceptance points, as well as the majority of ATMs, are off-line.

The area of sales and customer relations was neglected during the demand-dominated, centrally planned market period. As in all other branches of industry, services marketing and sales skills in banking were virtually non-existent. In many state-owned banks, customers were treated as supplicants, not as the most important source of revenue (Górniak, 1995). Foreign banks were able to gain significant advantages through better customer skills. Additionally, properly set marketing activities were able to attract corporate

customers by offering them individually tailored services. In Poland most of the innovative instruments, like futures contracts and new forms of financing, were introduced into markets by such banks as ING, Citibank and Creditanstalt Bank. Later, most of these instruments were copied by the leading domestic banks. The same relates in most cases to other countries. Domestic banks have also taken some steps in improving their client approach, as a means of improving their competitiveness.

The reconstruction and transformation of the modern EE banking systems in the 1990s is still far from complete. Financiai services in EE countries are stili underdeveloped. The density and quality of these services, although much improved during last few years, is still a far cry from Western standards. Retail financial services are neglected. For example, in Poland in 1997 an estimated 50% of households maintained savings, but only 25% had a bank current account, 6% took any form of credit, while just around 1% held a credit or debit card. Moreover, 36.7% of questioned had never even used a bank (Jershina, 1998). This points to the existence of high growth potential, especially if we take into account the underdevelopment of the non-cash payment system and the often low density of branch networks. Other Interesting fields for further expansion, relating to high economic growth and industrial restructuring requirements, are investment banking and mortgage financing. However, both of these fields lack clear regulations which in most cases are still pending. The presence of foreign banks and foreign capital in the EE economies is a clear indication of the market-based economic normalisation. All these changes make the EE banking system more open, more competitive, and better prepared for the future EU membership and for the challenges of the global economy.

1.6. Alternative comparative measure of banks' performance

For all branches of industry, **returns to scale and higher level of efficiency** are the prerequisite for the expansion of economic activities and for an increase in production. Specifically in the banking sector, the returns to scale argument has often been treated as an incentive for mergers and take-overs. Additionally, the level of returns to scale serves as a good aggregate measure that allows a distinction between different participants of the banking market.

This section will analyse whether the Polish and Hungarian banking sectors exhibit increasing returns to scale and particularly whether there are any differences in efficiency between foreign owned and other banks. I address these questions by examining the production function of a sample of around 60 Polish banks over the years 1991 to 1996, and of around 35 Hungarian banks over the years 1993 to 1995, as following the available data. Section 1.6.1 describes the theoretical background. Section 1.6.2 describes the results of empirical research and offers some conclusions.

1.6.1. Theoretical background

In order to analyse the existence of returns to scale and efficiency differences, we have to define the production function of the banking enterprise. **The Cobb-Douglas production function will be considered and applied to cross-section data.** The assumption that output is produced according to a Cobb-Douglas production function is introduced primarily because duality between the cost and production functions yields a function that can be easily and directly estimated and interpreted. Moreover, it allows to observe a dynamic of changes over a longer time period for which satisfactory data are available. Then the hypothesis of increasing returns to scale based on this type of function will be tested in relation to different groups of market players. In many of the

studies[16] of banking sector performance, output is assumed to be produced according to the Cobb-Douglas function. The assumption of such an underlying production process is introduced also to distinguish between financial (i.e. the value of capital, deposits, credits etc.) and organisational (i.e. number of employees, number of branches, scope of activity) inputs into production. Additionally, in the course of the analysis I also considered the more general case of the Constant Elasticity of Substitution function. However, the results which were obtained allowed it to be reduced to the simple Cobb-Douglas case. For given labour (x_1) and capital (x_2) inputs, and one output (y), the Cobb-Douglas function is given by the following equation:

$$y=A(x_1^{a1})(x_2^{a2}) \qquad (1.1)$$

where A,a_1,a_2 are positive constants .
This function can be generalised to:

$$y=A(x_1^{a1})(x_2^{a2})(x_3^{a3})....(x_n^{an}) \qquad \text{for } n \text{ inputs } x_1,x_2....x_n \; . \qquad (1.2)$$

The Cobb-Douglas function can be estimated using linear regression techniques, taking the logarithms of terms in the equation. Thus,

$$\log y = \log A + (a_1 \log x_1) + (a_2 \log x_2) \qquad (1.3)$$

The parameters A,a_1,a_2 have a simple economic interpretation:
Parameter A describes the "efficiency" as a proportion of the output, being the result of every combination of inputs. It is a rate of transformation of given inputs

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16 See: Mester (1987); Clark (1984).

into the final output. This measure will be consequeantly used to trace differencies between foreign and other groups of banks in Poland and Hungary. Parameters a_1, a_2 (or parameters $a_1,a_2...a_n$ in generalised form) describes the degree of homogeneity in the production function. This follows from the following equations:

$$f(tx_1,tx_2)=A((tx_1)^{a1})((tx_2)^{a2}) \quad (1.4)$$

$$f(tx_1,tx_2)=At^{(a1+a2)}(x_1^{a1})(x_2^{a2}) \quad (1.5)$$

Thus, if $a_1+a_2=1$ then the Cobb-Douglas production function is homogeneous to the first degree, and this means that the production described by such a function has constant returns to scale. If $a_1+a_2 >1$, then the Cobb-Douglas production function exhibits increasing returns to scale. The level of returns to scale is therefore a compact measure for the possible differences between various groups of producers in a given sector.

Obviously, the important part of this model will be constituted by the definition of the included variables. The question is: **what are the inputs and outputs in a bank's production?** The nature of banking creates some difficult problems for measuring a bank's products. Banks deliver a large number of services, and there are a several indicators that are commonly used to measure a bank's production. Favero and Papi (1995) identify five approaches to the input and output specification in banking. Three of these: the production, intermediation and asset approaches are related to functions performed by banks. **Production approach** consider banks as producers of deposits and loans services and measure production in number or volume of theses, while inputs include capital and labour. Under **intermediation approach** banks are viewed as entities which transform and transfer financial resources, while **asset approach** can be regarded as a special case of intermediation approach where

some positions from asset side are regarded as outputs. The shortcoming of this approach is that it does not take into account the variety of services provided by the bank. Two other approaches specified by Favero and Papi (1995) are: **user cost approach** under which the net contribution to bank revenue determines the nature of inputs and outputs and **value added cost approach** which identifies inputs and outputs according to their share of value added. However, both user cost and value added approaches were rather used in individual banks studies as their required in-depth knowledge about given bank's nature. In cross-section studies intermediation and assets approaches have been more widely used[17]. Kalish & Alton (1973) distinguish between **two kinds of measures of a bank's output:**

- income statement measures; and
- balance sheet measures.

The balance sheet measure of bank output represents the value of loans plus investment plus some correction indicators. This assumes that the effect of the "production" of banks is a wide range of services, represented in the balance sheet of a given bank. I am using the total value of assets (measured in PLN and HUF respectively) as a balance sheet measure, thus adopting asset approach. The inputs used in the estimation were capital (for capital input - measured also in PLN and HUF) and the number of employees (for labour input) taken from "Gazeta Bankowa" issues and "Hungarian Financial and Stock Exchange Almanac" for Poland and Hungary respectively. This choice of inputs and output allows primary to be consistent with existing literature but also to analyse 7-years period of banking sector activities in case of Poland and 3-years period in case of Hungary. Cross-section estimation performed for each year

17 Heggestad (1979) provides an interesting survey of more than 40 studies on performance in banking.

separately allows to observe dynamic of changes within specified period. For these periods data were available for sufficient number of banks. These variables performed well (see: Appendix 1), although a good substitute for the number of employees is the number of branches (correlation around 0.95).

For the purposes of the estimation the following variables were used:

bal - the total value of liabilities or assets (in PLN, HUF)

cap - the bank's own capital (in PLN, HUF)

emp - the number of employees

for - the dummy variable: **1** for state-owned banks with a state guarantee on deposits;
0 for other banks

lcap, lprob, lbal etc. - logarithms of the main variables.

The following function was estimated:

$$lbal = a_1 + a_2 lcap + a_3 lemp + a_4 for\ lcap + a_5 for\ lemp \qquad (1.6)$$

Therefore the sum $a_2 + a_3 + a_4 + a_5$ gives an estimate of the level of returns to scale in the foreign banks, while $a_2 + a_3$ is an estimate of returns to scale in other banks. Additionally, the Wald test will be applied to distinguish if $a_2 + a_3 + a_4 + a_5$ and $a_2 + a_3$ are significantly different (at 5% level) from 1.

In the case of Poland, for a period of 1993-1997 an additional variables **own** and **non** was introduced:

own - the dummy variable: **1** for state banks with a guarantee on deposits;
0 for other banks

non - the dummy variable: **1** for state banks or foreign banks;
0 for other banks

so the estimated equations follows:

$$lbal = a_1 + a_2 lcap + a_3 lemp + a_4 own\ lcap + a_5 own\ lemp \quad (1.7)$$

$$lbal = a_1 + a_2 lcap + a_3 lemp + a_4 non\ lcap + a_5 non\ lemp \quad (1.8)$$

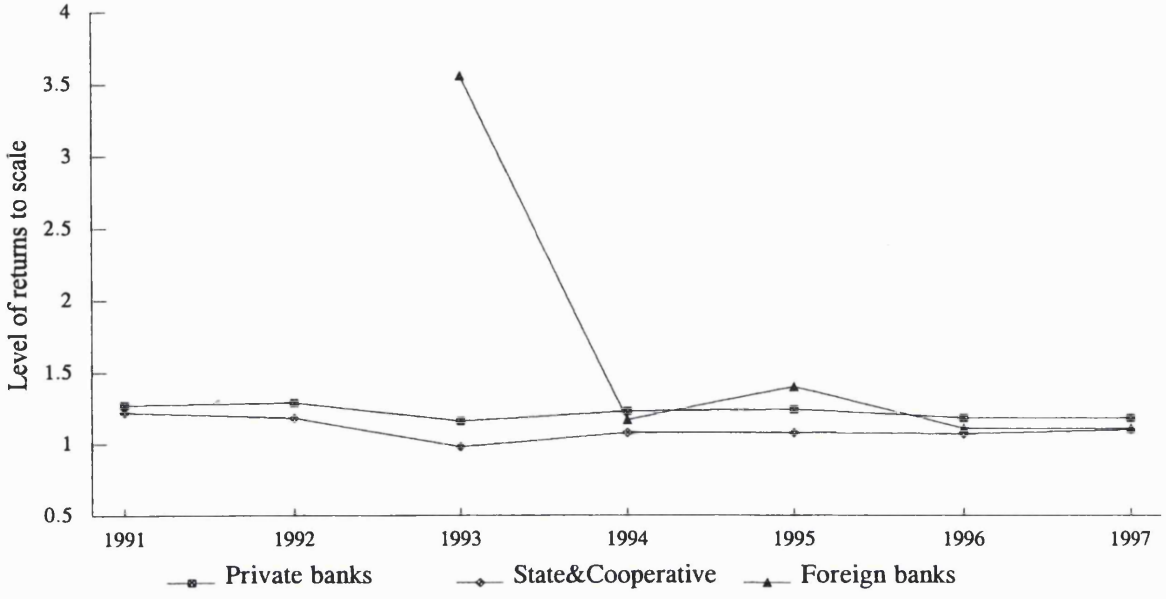
This allows us to distinguish additionally between state-owned and other private, non-foreign banks. In the Hungarian case, due to the lower number of observations and in fact a low population of private, non-foreign banks, this variable was not introduced. The same relates to the Polish sample for a period of 1991-1992 with respect to foreign banks, where the variable **for** was not introduced.

The financial data for the estimation were collected from the ranking of Polish banks published in the yearly appendices to "Gazeta Bankowa", the "Almanac of Hungarian Banks" and various other sources. These data are generally regarded as reliable, as National Banks does not disclose data on individual banks. Therefore, the only reliable source is the collection of annual audited reports from given banks, which was generally the primary source for two publications mentioned above.

1.6.2. The results of calculations

The results of the estimations are given in Appendix 1. Graph 1.1 and 1.2 summarise the results of these estimations with respect to returns to scale, while Table 1.13 gives values of returns to scale and efficiency parameters.

Graph 1.1 Returns to scale in the Polish banking system



Graph 1.2 Returns to scale in the Hungarian banking system

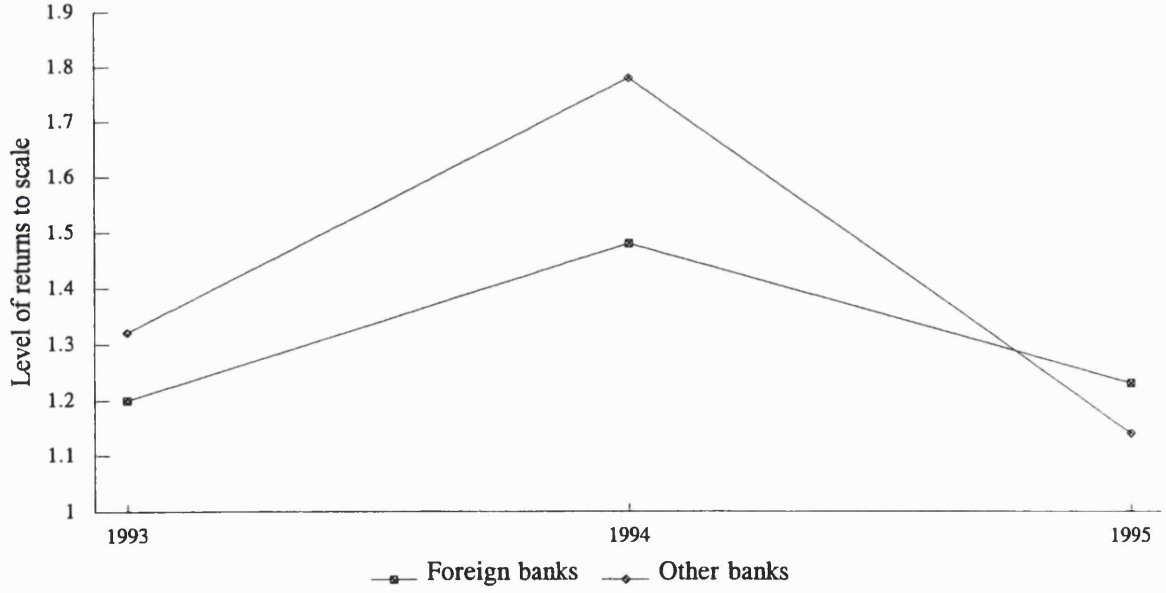


Table 1.13 Efficiency and returns to scale in EE banks

Year	Foreign banks		State banks[1]		Private banks	
Poland						
	scale	*efficiency*	*scale*	*efficiency*	*scale*	*efficiency*
1991	n.a.	n.a.	1.22	0.54	1.27	0.15
1992	n.a.	n.a.	1.18	1.02	1.29	0.23
1993	3.56	**-8.75**	0.98[2]	2.67	1.16[2]	**1.08**
1994	1.17	**1.54**	1.08[2]	**1.93**	1.23	**0.64**
1995	1.4	-0.34	1.08[2]	0.92	1.24	**-0.33**
1996	1.11[2]	0.94	1.07[2]	1.20	1.18	**0.26**
1997	1.11[2]	1.12	1.10[2]	0.84	1.18	**-0.09**
Hungary						
1993	1.20[2]	2.982	1.32	1.46	n.a.	n.a.
1994	1.48	**-0.51**	1.78	**2.68**	n.a.	n.a.
1995	1.23	1.97	1.14[2]	**3.33**	n.a.	n.a.

Source: Author's calculations based on Cobb-Douglas production function, bold-faced coefficients denote significance of difference in efficiency from other banks at 5% level.
[1]In Hungarian sample - non foreign banks
[2]Hypothesis of constant returns to scale cannot be rejected at 5% level

According to the results obtained, **we can generally describe the Polish and Hungarian banking sectors as characterised by increasing returns to scale**. However, in the Hungarian case there was no clear pattern of differences between the returns to scale in foreign versus other banks. As with regard to differences in efficiency, foreign banks operated on higher level of efficiency prior to entry into a process of privatisation of large state-owned banks in 1994 (compare section 1.3.2). Later their efficiency diminished, probably because of restructuring and costs associated with solving of bad debt problem. However, the results of efficiency parameter estimation are not statistically reliable and therefore, taking into account low number of observations and banks included, should be treated with caution.

In the Polish case, foreign banks displayed higher returns to scale than other groups of banks in 1993 and 1995. In both cases high level of returns to scale was coupled with relatively low level of efficiency. This reflects a fact that in both years significant group of these banks remained in relatively nascent phase of operations. They displayed low efficiency, but potentially were able to exploit high returns to scale in next years. However, as in Hungary, the estimation does not provide strong evidence of significant differences in levels of efficiency between foreign and other groups of banks. Foreign banks increased their efficiency parameter relatively to other groups of banks over time, but again the differences observed were not statistically significant. This leads to the conclusion that **other motives, apart from the expected higher efficiency, should be taken into account while analysing reasons of foreign banks entry into EE countries.** An analysis of these motives will follow in Chapter 3.

The lack of clear pattern of differences in performance of foreign and domestic banks in Hungary might appear to be in contrast with Sabi's (1996) study, which concluded that "there are differences between the operation of foreign and domestic banks" (p.187). However, his analysis focused on short-term profitability measures that were affected by the quality of assets. Obviously, asset quality was lower in domestic banks as it was affected by the legacies of previous system. On the other hand, profitability can be seriously affected by other externalities, such as weak Stock Exchange performance or a significant volume of new entries. In the long run, the quality of assets should improve. As there should be no significant variance between the two groups of banks in terms of their ability to "attract" assets, given their capital and labour inputs, profitability will be more affected by factors such as know-how, staff skills, etc. In the Polish case a low level of efficiency in foreign banks in 1993-1995 period can be explained by relatively the short period of operations in a number of just-licensed foreign banks. In EE countries, the start-up period requires at

least a year to achieve a break-even volume of assets. In comparison, corresponding results given in Konopielko (1995) for two countries in the EU whose experience is similar to the EE countries, Spain and Portugal, confirm that only bigger banks or very specialised ones are able to achieve competitiveness. According to these estimates, in 1991 the Spanish banking sector displayed decreasing returns to scale. The results for Portugal allow the assumption of increasing returns to scale, although the results themselves were statistically unreliable.

Critics of these postulates stress that the production process of banks is quite different than in typical branches of industry (Baka, 1994; Wachtel, 1995). The most important factors in banks' services are thus quality, confidence and accessibility. However, these factors are difficult to quantify, and apart from descriptive evidence it is hard to verify if there are significant differences in this respect between the different categories of banks.

1.7. Conclusions

Key features of the banking system under centrally-planned regimes have influenced strongly banks' recent and current performance in EE countries. An explosion of bad debts, technical underdevelopment, and a low level of financial intermediation are just some of the features clearly visible in most of the EE economies and to greater extent caused by the previous past institutional and organisational set-ups of these countries' banking systems. **This chapter provided the basic characteristics of Polish, Hungarian and the Czech Republic's banking reforms and discussed the specific features of each banking system.** The main focus of the country profiles was ownership changes and particularly the issue of foreign entry. On this front, the foreign banks are perceived to introduce an important stimuli for competition as well as

generally to perform better than the domestic banks. However, judging by the comparative analysis of the financial data, their performance differs in each country in question and over time. Moreover, it is argued that the short period profitability ratios are not adequate measures of performance in the EE circumstances. In the longer term, after coping with inherited problems, domestic banks can successfully compete with the foreign ones, providing that property rights in these banks are properly established.

Each country also differs with respect to the privatisation of large state banks. One extreme is Hungary, where major banks, after some delays, were sold directly to mostly foreign investors. Poland adopted a more gradual approach, using a variety of privatisation methods, mostly combining public offers with strategic investor entries. On the other extreme, the Czech Republic actually retained control over major banks, having some portions of them traded on the stock exchange. **The institutional set-up of privatisation has a fundamental influence on banks' performance**, especially with respect to the level of bad debts, which in the early 1990's contributed to the growth of budget deficits through several "loan consolidation" schemes adopted in these countries. Privatised Hungarian banks rushed to restructure and clean up their portfolios and adopted prudent lending techniques. Polish banks decreased new bad debt accumulation and in many cases, by recovering some of the older ones, managed to lower the overall level of these debts. The Czech banks continue to accumulate defaulted credits, despite several state-orchestrated bailout schemes. Nevertheless, **Eastern Europe still remains a place of great opportunities for FDI in banking services**. The technological and institutional revolution in the banking sectors in this region is still far from being complete and these opportunities arise not only in the area of pure banking activities but also in other sectors associated and strongly linked with banking such as consulting, legal services, IT services etc.

Chapter 2. Financial repressions and their consequences

2.1. Theoretical background

The reforming East European economies were, and to some extent still are, **financially repressed economies** in terms of the concept advanced by McKinnon (1991). This notion is especially valid with respect to the banking sector. Denzier at al. (1998) refer **financial repression term to a set of policies, laws, formal regulations, and informal controls, imposed by governments on the financial sector, that distort financial prices - interest rates and foreign exchange rates - and inhibit the operation of financial intermediaries at their full potential.** During the transitional period, the general level of tax evasion tends to be very high due to weaknesses in the administrative and regulatory structure and to tax base erosion. Therefore, in order to maintain fiscal stability, the authorities target the financial sector, which due to its peculiarities, such as a relatively low number of players and a high level of required accounting transparency, seems to be comparatively easy to tax. The other argument behind increasing the tax burden on the banking system is that in an inflationary environment, banks often display extraordinary inflationary profits. Such profits might also be linked to the revaluation of foreign currency denominated assets (Kun, 1996) or the oligopolistic position of some banks. As banks become subject to a high level of explicit and implicit taxation, their behaviour is significantly affected, for example in the area of provision-making or interest rate margins.

Another feature of a financially repressed economies in the context of McKinnon's concept is the: "repression-mandated" allocation of credit by governments at artificially low interest rates in a situation of high and volatile

inflation, in order to promote investment and permanent state intervention at the micro level. In these repressed monetary systems, interest rates varied from borrower to borrower, the flow of loanable funds was reduced, forcing firms to rely on self financing. By interfering in the financial market, the government attempts to replace direct budgetary spending with some forced financial sector activities, or at least an improvement in budget performance. However, the liberalisation process requires an effective lowering of the level of interference, as the system's competitiveness should increase to withstand foreign competition. Moreover, the EE countries will face immediate pressure to reduce the level of intervention in banking services due to the prospect of joining the EU and the need to conform to EU banking directives.

2.1.1. Financial repressions and their effects

According to McKinnon, "[i]f government tax or otherwise distort their capital markets, the economy is said to be financially repressed" (McKinnon,1991, p. 11). The expression "financial repression" was first introduced by Edward Shaw in 1973 (Shaw, 1973). By analysing the definition of financial repression and applying it to the banking sector, we can differentiate between two types of repressions. **The first type**, which is in fact the special case of the second, general type, takes place when the government extracts implicit taxes in some way from the banking sector. In a wider meaning, **the second type** is observable when government in some way restricts and regulates banking activities. Actually, the second type contains all regulatory exercises of government with respect to the financial system, as regulations force the system to move from its natural equilibrium level and therefore increase the costs of providing services. This second type is executed by creating a multi-tiered bureaucracy and regulations which stipulate and enforce

detailed rules for every entity in the system. The total compliance costs are difficult to estimate, as only a few elements of them can be directly measured.

McKinnon (1991) argues that **the level of financial repression is significantly higher for developing economies than for the developed ones.** Actually, the higher level of openness of developed economies forces them, in order to prevent competitiveness to remove existing repression, especially of the first kind. In the developing countries, banking systems play a relatively more important role as an intermediary between savers and investors than it plays in industrial countries (McKinnon and Mathieson, 1981). The lack of developed financial markets and the low level of the securitisation process result in a pattern of saving dominated by money deposits within banks. Control over financial flows (especially over M2 money aggregate) then becomes a very important task for the government. The main institution that conducts this control is the country's central bank. Thus, control over this institution can be treated as an intermediate target aimed at the control of the money flows. It is not by chance that more developed countries tend to have more independent central banks. "What is purely a supervisory and monetary control role for governments in most industrial countries, becomes a high activist credit-allocation role for governments in developing countries" (McKinnon,1991, p. 52). Obviously, this credit allocation is aimed mainly at credits granted on special conditions for the government (i.e. implicit tax revenue for the budget). Such implicit tax can take the form of reserve requirements on commercial banks, usury laws that limit interest rates payable on deposits or loans, or obligatory credit allocation. These distortions can make bank deposits unattractive relative to real assets or government securities, especially when restrictions are accompanied by a high inflation rate.

The first kind of the financial repression (i.e. aimed at budget revenue) is quite often linked with the absence of developed treasury bond

markets as well as with a high level of budgetary spending. This was clearly the situation that took place during the first years of transition in EE countries. Forced sales of government debt to the banking system in conjunction with a high level of reserve requirements give the government direct access to bank credit, usually at a preferential (or in some cases zero) nominal interest rate. Also, restrictions on credit allocation "allow regulatory authorities to give credit subsidies to preferred claimants without having such subsidy appear at a official Treasury account " (McKinnon, Mathieson,1981, p. 5). This is the reason for establishing a number of para-bank governmental agencies which channelled cheap credit to preferred economic agents as well as why the free flow of funds in the economy is truncated.

There are **five main consequences of such repression**, as pointed out by McKinnon (1991):

1. The flow of loanable funds through the organised banking system is reduced and this forces firms to rely more on self-finance.
2. Interest rates on the truncated flow of bank lending vary arbitrarily from one class of favoured or disfavoured borrower to another.
3. Due to the low (or negative) real interest rate on deposits, the accumulation process in preparation for investment is longer and investment is more expensive.
4. All these things introduce an element of uncertainty and instability into the economy, because of unpredictability of the government regulation.
5. This affects also inflows of the foreign financial capital, which under such conditions can be unproductive due to the lack of

predictability of the exchange rate as well as the behaviour of the domestic capital markets.

2.1.2. Order of liberalisation

The required process of liberalisation in financial sector can be described as follows: The economy starts from a steady-state of financial repression, such as the situation described above. In the steady-state, there are interest rate subsidies to a certain population of preferred borrowers and non-interest bearing reserve requirements against deposits (or even credits). Additionally, in this state, a substantial part of the budget deficit is financed by seigniorage[18] linked with an increase of the money base. In general, this leads to a situation of low domestic real interest rates on deposits which tend to be below the world level. In order to escape government regulation, in a situation of fully liberalised capital accounts, this can lead to moving banking activities to off-shore centres. If allowed, domestic residents will also tend to shift their portfolios abroad and use cross-border financial services. Thus, we can conclude that **if the capital account is liberalised before domestic liberalisation, it can result in a financial outflow.** One of the consequences of domestic financial liberalisation will be a rise in the general level of domestic real interest rates. Additionally, the ability to impose reserve requirements will be severely impaired. This will have important implications for fiscal policy.

In the steady-state of financial repression, a substantial part of the budget deficit is financed by implicit taxes (reserve requirements, etc.) on the banking sector and by seigniorage revenue. The need for this source[19] of financing emerges in countries where it is not possible to extract **additional**

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[18] Seigniorage can be treated as a inflation tax linked to newly printed notes. As such is generally equally distributed among economic agents. Some sources (Gros,1989) treat seigniorage together with other instruments extracting money from the banking sector. In this paper the influence of the seigniorage will not be discussed.

[19] As well as to some degree for other more conventional and unconventional types of taxes applied in 'transitional' economies.

revenue through classical methods of taxation due to tax evasion, and where expenditure cuts are not politically feasible. This is a situation likely to be faced by most developing countries and by the economies in transition. **Liberalisation tends to eliminate revenues from seigniorage and implicit taxation of the banking system, as well as increase interest rates.** For political reasons, authorities are unable to compensate for the tax base erosion through an increase in traditional taxes. Therefore, we can say that starting domestic financial liberalisation from a situation of high public debt, the government must have a prospect of running primary surpluses of the tax base linked with GNP growth in the future, or at least be a credible borrower. Otherwise there is a possibility of serious fiscal imbalances. The meaning of this finding, especially for Eastern Europe, is that **financial and fiscal reforms have to run simultaneously.**

After successful financial liberalisation, the government tends to shift from the regulations directed at extraction of tax revenues into regulations which aim to promote stability and efficiency in the banking sector. The stability of this sector is also crucial for the tax base, as it provides financial resources for a number of economic agents that in fact create the tax base. According to Broker and Schuijer (1991), the basic purposes of this kind of regulation are to:

1) maintain the stability of, and confidence in, the financial system by ensuring the solvency and financial soundness of financial institutions (i.e. to prevent systemic risk);

2) protect investors, borrowers and other users of the financial system against undue risks of losses and other damage that may arise from failures, fraud, malpractice, manipulation and other misconduct on the part of providers of financiai services (i.e. to minimise Individual risk);

3) ensure the smooth, efficient, reliable and effective functioning of the financial markets and a proper working of competitive market forces (i.e. to promote systemic efficiency)

Obviously a conflict between the different purposes of the regulations may occur. For example, regulations designed to minimise individual risk can protect and help weak, small banks in trouble, and as such do not necessary promote efficiency (see Chapter 5 for SCP discusion). In highly developed countries, there is a significant shift from anti-competitive regulations to prudential regulations, which set standards for the secure management of financial institutions. Prudential regulations are more mature, market-oriented, and better balanced between the purposes of stability and client protection on the one hand and systemic efficiency on the other than are anti-competitive restrictions.

In addition, it is worth mentioning that from the standpoint of a bank's profit function it generally does not matter which kind of financial repression is applied. All of the restrictions described above can lead to a decrease in bank's profits due to the costs of compliance. Obviously, as these repressive regulations do not only have an influence on banks' behaviour, there will be some differences in the nature of the resulting distortions for different outside economic agents. Each of these repressions, intensively used, can make the banking system unattractive for investors. It is not by chance that repressed economies are dominated by state banks. For private investors (regardless of the size of investment and other obstacles), such repressed sectors are simply unattractive.

Gowland (1990) argues that looking throughout the social welfare function it is impossible to distinguish which kind of regulation is desirable, or even if regulation is desirable at all. He argues that in some cases the benefits

from regulation can outweigh the opportunity costs. For the given circumstances it is also hard to recognise which kinds of restrictions (if any) are the most efficient. According to him: "[i]t is a case that the rationale for regulating financial markets is weak and underdeveloped. To the pragmatic 'any regulation is better than none' it is worth responding '[...] that for success, it is essential to know what one is seeking to achieve' " (Gowland, 1990, p.52).

2.2. Reserve requirements as a repression tool in Eastern Europe[20]

This section will focus on one of the "first type" repressions (see section 2.1.1.), namely on **obligatory reserve requirements**. The reason is that the effects of these reserves can to great extent be quantified, and compared with those in other non-EE countries. Additionally, it can argued that by easing the reserve regime as well as other financial repression instruments, EE financial regulators might allow their domestic banks to became more competitive as well as dispose of some of their retained funds to better prepare for facing foreign competition. However, in most cases budgetary consideration has a clear priority over long-term, pro-competitive reasoning. Moreover, if we assume that implicit revenue from reserve requirements was implicitly used to recapitalise the banking system, the benefits of reserves were unevenly distributed and most of them returned to the state-owned part of the system.

2.2.1. Reserve requirements - theoretical background

Reserve requirements can be defined as **regulations which force banks to retain a strictly defined proportion of the value of liabilities (or sometimes assets) on a non-interest or low-interest bearing account at the central bank**. The core of this regulation is the level of these requirements given

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20 This section is based on Konopielko (1997).

by a percentage of specified groups of liabilities (in most cases deposits) which have to be placed in the central bank. This percentage can vary for different groups of assets and most often is set down with respect to the value of the term and demand deposits.

Authorities argue that reserve requirements play an important role in **preventing of systemic risk** as well as in **conducting monetary policy**. Indeed, the reserve requirements are a powerfull instrument of monetary rather than prudential control in EE countries, especially due to the low level of financial market developement and thus non-existence of more sophisticated instruments. However, Kantas and Greenbaum (1982) showed that the predictability of money aggregates is enhanced by reserve requirements only if there are no financial innovations induced by requirements. They point out that the implementation of monetary policy might be better served by interest payments on central bank deposits rather than legal reserve requirements. Actually, due to their low profitability (or even negative profitability in the case of the lack of compensation for inflation) reserve requirements might be regarded as having been established for the purpose of obtaining a **cheap source of financing** for the central bank and, through it, for the state budget. Therefore, they can be viewed as an **implicit tax** on banking activities. As Hoschka (1993) argues:

> The benefits of reserve requirement are not clear. While they are mostly regarded as a monetary policy instrument, countries are able to pursue effective monetary policy by other means (..). Primarily, reserve requirements constitute an important source of revenue for the government and thus replace other forms of taxes. (p.56)

Obviously, in some cases, the existence of such reserves can prevent some problems for the banks, but it can only do so when easy access to these reserves for the banks in trouble is granted. Reserves can be only a

short-run, additional source of help as they are usually not enough in themselves to outweigh heavy disturbances in banks` liquidity. Moreover, it can be argued, as in Galbraith and Rymes (1993), that the central bank can better influence banks by properly setting overdraft rates within the clearing system. As with other financial repression instruments, there is a close linkage between the level of independence of the central bank and the scale of application of these instruments. More independent central banks shift towards regulations that are less-repressive and aimed at the stability of the banking system, rather than focused on the increase of budget revenue. The role of reserve requirements in conducting monetary policy was in the past few years reduced, and replaced by other, more sophisticated instruments (i.e. open-market operations). However, **in EE countries with underdeveloped financial markets, reserve requirements still have an important role in conducting monetary policy.** But in next sections I will focus on quasi-fiscal effects of reserve requirements, which seems to be generaly neglected in analysis.

2.2.2. The model

In order to show how reserve requirements interact with other instruments of banking activity, a special version of a simple Klein-Monti model will be described (similar models are presented in: Repullo, 1991; Molho, 1992). This model assumes the existence of the three types of agents in the economy: consumers, firms and banks. It also includes the existence of a government which issues bonds to cover the public debt. There are three different interest rates in the economy:

i_D - deposit interest rate ($i_D>0$)

i_L - loan interest rate ($i_L>0$)

i_B - bond interest rate ($i_B>0$)

Consumers have a deposit supply function $D_S(i_D,i_B)$ such as:

$$\frac{\delta D_S}{\delta i_D} > 0 \quad \text{(condition 1)}$$

$$\frac{\delta D_S}{\delta i_B} < 0 \quad \text{(condition 2)}$$

and a bond demand function $B_d(i_D,i_B)$ such as:

$$\frac{\delta B_d}{\delta i_D} < 0 \quad \text{(condition 3)}$$

$$\frac{\delta B_d}{\delta i_B} > 0 \quad \text{(condition 4)}$$

Firms display a loan demand function $L_d(i_L)$ such as:

$$\frac{\delta L_d}{\delta i_L} < 0 \quad \text{(condition 5)}$$

Banks are the local monopolist and they are setting i_D and i_L. The representative bank faces a deposit supply function $Ds(i_D,i_B)$ and a loan demand function $L_d(i_L)$. Additionally the bank is a subject to reserve requirements and has to hold fraction *k* of its deposits in a form of cash[21]. The crucial balance sheet equation balancing assets with liabilities for the representative bank is given by:

$$L + B + R = D + E \qquad (2.1)$$

where: **L** is the value of loans granted by the bank

B is a value of bonds in the bank's portfolio

R is a value of reserves requirements such as R = kD

D is a value of deposits located within bank

E is the value of bank's own funds

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[21] As was mentioned, normally the banks hold their reserves in the central bank. For simplicity we can assume that cash is the equivalent of the deposit within the central bank. Actually in some countries (i.e. Poland) the average level of cash in a treasury can be deducted from reserve requirements.

The bank is maximizing its profits[22] Π subject to the given above balance sheet equation (2.1):

$$\Pi = f(M,X) \qquad (2.2)$$

where M is a vector of market structure variables and X is a vector of firm-specific variables. Particularly, in short term M is assumed to be fixed and:

$$\Pi = i_L L + i_B B - i_D D - Z + M \qquad (2.3)$$

where Z represents total operating expenses which are also assumed to be fixed. Substituting B from (2.1) into (2.3) and assuming that R = kD, the objective function looks as follows:

$$\Pi = (i_L - i_B)L + [(1-k)i_B - i_D]D + i_B E - Z + M \qquad (2.4)$$

The first - order conditions for a maximum are:

$$\frac{\delta \Pi}{\delta i_D} = \frac{\delta D}{\delta i_D}((1-k)i_b - i_D) - D = \qquad (2.5)$$

$$\frac{\delta \Pi}{\delta i_L} = \frac{\delta L}{\delta i_L}(i_L - i_B) + L = \qquad (2.6)$$

Solving for i_D and i_L we get:

$$i_D = \frac{(1-k)i_B}{1+e_D^{-1}} \qquad (2.7)$$

$$i_L = \frac{i_B}{1+e_L^{-1}} \qquad (2.8)$$

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22 Some versions of this model assume the maximisation of the value of total assets (Molho, 1992), but this does not have any influence on the results.

where:

$e_D = \frac{\delta D}{\delta i_D}\frac{i_D}{D}$ i.e. the elasticity of deposit supply with respect to the deposit interest rate

$e_L = \frac{\delta L}{\delta i_L}\frac{i_L}{L}$ i.e. the elasticity of loan demand with respect to the loan interest rate[23].

Equation (2.8) is the most important equation, showing the influence of the reserve requirements on interest rates. Also, as in the standard Klein-Monti model the exogeneity of the bond rate i_b brings independence between the bank's deposit and loan rate decisions. Assuming additionally that reserve requirement are applied simultaneously with the minimum deposit rate restriction, the bank cannot reach its maximum profit point and its profits depend on exogenous variables.

In order to analyse the influence of a change in the reserve requirement, we should add an equation describing the bond market:

$$Bo(i_D, i_B) + B = BS - BC \qquad (2.9)$$

where:

$Bo(i_D, i_B)$ - bond demand of other agents

BS - bond supply

BC - bonds in central bank's portfolio

Substituting B from (2.1) we get:

$$Bo(i_D, i_B) + (1-k)D - L - E = BS - BC \qquad (2.10)$$

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[23] Assumption: $e_L < -1$.

By taking the total differentials of equations (2.7), (2.8) and (2.10) with respect to k and assuming that own rate effects are greater than the absolute value of cross-rate effects i.e. $\frac{\delta Bo}{\delta i_D} + (1-k)\frac{\delta D}{\delta i_D} > 0$ and $\frac{\delta B}{\delta i_B} + (1-k)\frac{\delta D}{\delta i_B} > 0$, we are able to estimate that: $\frac{\delta i_B}{\delta k} > 0; \frac{\delta i_L}{\delta k} > 0$. However, the sign of $\frac{\delta i_D}{\delta k}$ is ambiguous. This means that the increase in the ratio of required reserves leads to an increase in the bond interest rate, as it decreases the funds available for banks to invest in bonds, and therefore decreases bond demand. This causes the bond interest rate to grow. The shift in asset structure also decreases lending, and therefore the loan rate charged by banks increases. However, the influence of the changes in the k - ratio on deposit rates is ambiguous. As in equation (2.7), the effect of an increase in k might be offset by a simultaneous increase in i_B.

If we substitute i_B from (2.7) into (2.8) we get:

$$i_D = \frac{(1-k)i_L}{(1+1/e_L)/(1-1/e_D)} \qquad (2.11)$$

If we assume, relaxing previous assumptions, that banks are operating in a perfectly competitive environment, the elasticity of deposit supply as well as the elasticity of loan demand tend to infinity. Then, we have a case:

$$i_L = \frac{i_D}{1-k} \qquad (2.12)$$

The equation (2.12) describes the relation between the deposit interest rate and the lending interest rate or its opportunity cost i_B in presence of the reserve requirements. McKinnon (1991) obtains this equation assuming that banks operate with zero profits and that current earnings from loans are fully paid out to depositors. Mixing this break even point condition with a high inflation rate, he concludes that as inflation increases, banks are forced to pay a higher

nominal interest rate on deposits in order to maintain their real deposit base. Because of the non-interest-bearing reserve requirement, however, the loan rate must increase even more for the banks to continue to break even. Thus, when these nominal interest rates are free to adjust, inflation increases the wedge between deposit and lending rates of interest.

Molho (1992) considers other version of the model. He assumes that the loan interest rate and loan volume are non-flexible, i.e. banks are limited by already signed contracts. Therefore, when facing an increase in the rate of reserve requirement, banks might only manipulate the interest rate on deposits. In such a situation, banks accommodate a reduction in the supply of deposits caused by increased reserves by lowering the volume of bonds held in their portfolios, which in turn increases the bond interest rate.

2.2.3. Measurement concepts

As with other financial repression tools, **reserve requirements are aimed to extract an implicit tax revenue from the banking sector**. Two methods of this extraction are possible:

1. The direct use of reserve requirements for financing public debt or for quasi-budgetary purposes in a broad sense, for example by an open credit account for the budget within the central bank, or preferential credits granted to government-selected projects.

2. Indirect support for the budget from the dividend from the central bank's profits. The central bank uses reserve requirements refinances banks or other agents, to gain extraordinary profits from the spread between zero (or very low) interest rate deposits and refinancing rate credits.

In both cases it is possible to calculate the extra budget revenue. Two types of calculation[24] can be used. The first assumes that the effect of reserve requirements is similar to that from issuing fiat money, while the second focuses on opportunity costs.

Calculation based on cash-flow definition of seigniorage.

The extension of the cash-flow definition of seigniorage on reserve requirements assumes that if no interest is paid on the balances the banks are required to hold with the central bank the economic nature of these required reserves is similar to that of currency: by increasing the amount of required reserves the government obtains an asset which can be used to acquire real resources (Gros, 1989). Therefore, the measure of the revenue from reserves follows:

$$V_1 = \Delta R \qquad (2.13)$$

which simply measures the increase of total reserve value for a given period. However, in some countries banks receive interest, usually below market rate, on their obligatory reserves within the national bank. If we adjust equation (2.13) by the value of due interest paid, we get:

$$V_1 = \Delta R - i_R R \qquad (2.14)$$

where i_R is the rate of interest paid on required reserves. It is worth noting that equation (2.14) may lead to a situation where for a given period the value of revenue from reserves is negative.

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24 For a wider discussion of both definitions see Gros (1989).

Calculation based on opportunity costs

This calculation is based on difference between the average loan interest rate that is the opportunity cost[25] of financing the budget by issuing bonds and the interest rate on reserves (if not equal to zero). That is:

$$V_2 = i_B R - i_R R \qquad (2.15)$$

This definition avoids the conceptual problems of possible negative value of implicit tax revenue as defined by the cash-flow definition[26]. However this calculation does not take into account the increase of bond rates caused by reserve requirements[27]. Therefore, the opportunity cost method may give an upwardly biased estimate.

We will employ both definitions to estimate implicit tax budget revenues in Poland and Hungary for the periods 1991-1994 and 1990-1994 respectively, as data, given in Appendix 2, available. Graphs 2.1 and 2.2 summarise these data, while the next section analyses results.

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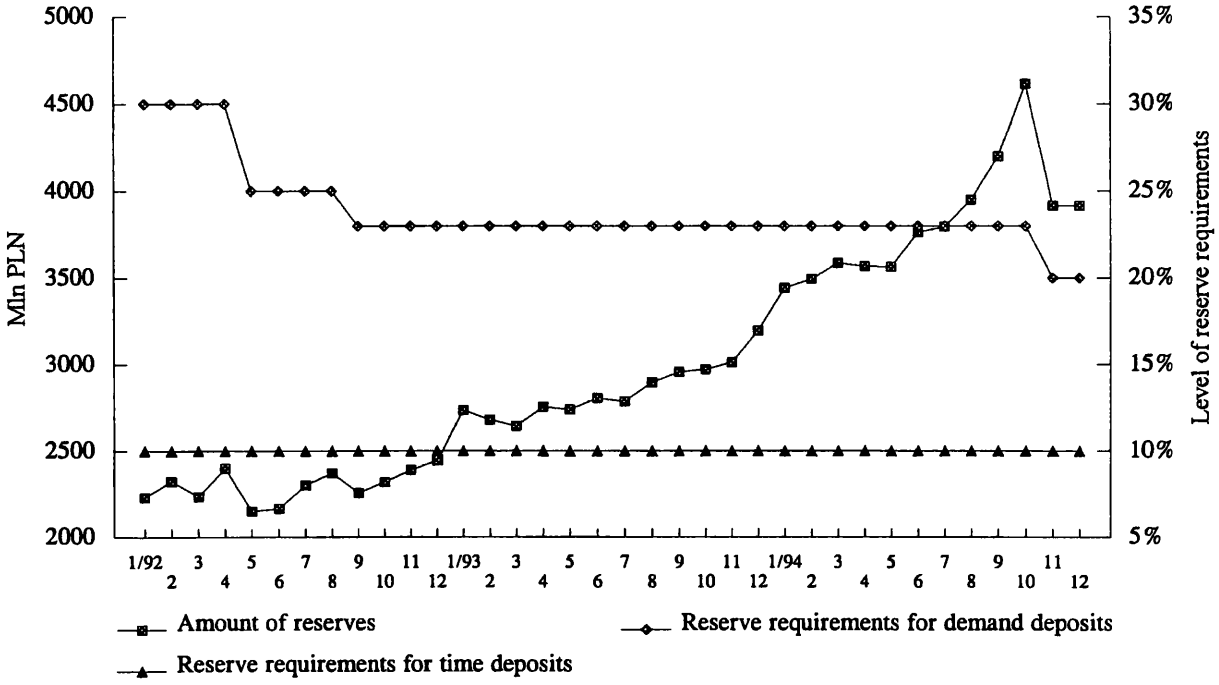
25 From the purely theoretical point of view, it measures the cost of not having reserves.

26 Assuming that $i_B > i_R$.

27 As described in Part 2. However, we may assume that this effect is negligible, as only newly issued bonds are affected by changes in *k*.

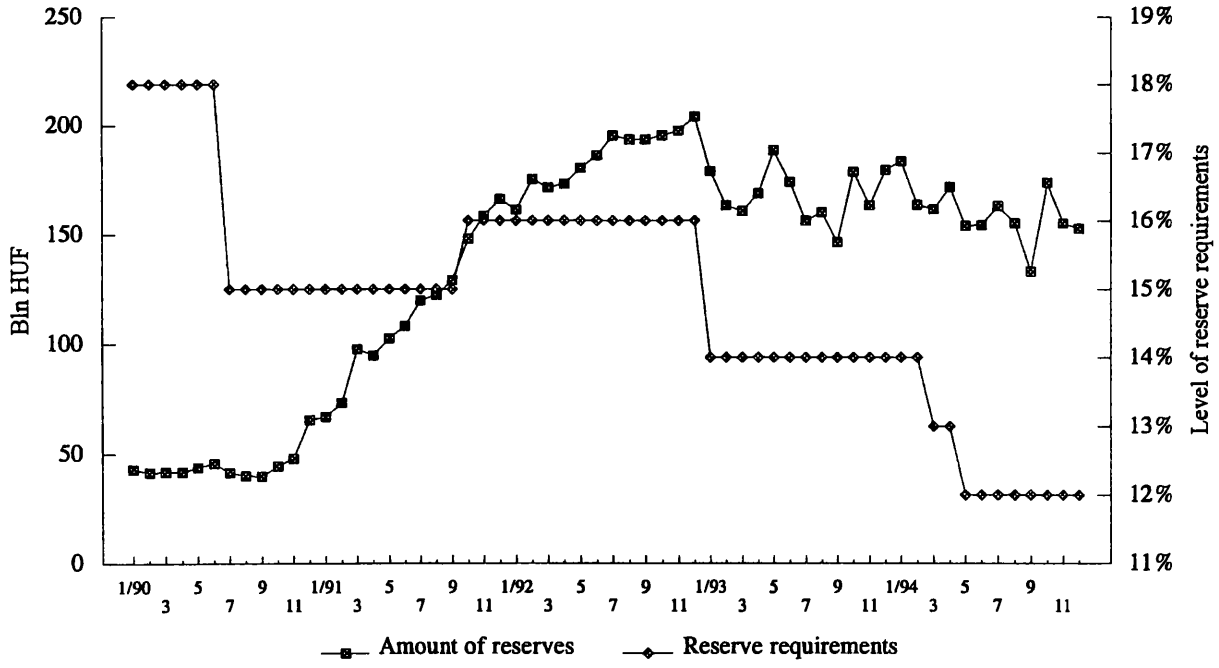
Graph 2.1 Amount and level of reserves in Poland

Source: NBP



Graph 2.2 Amount and level of reserves in Hungary

Source:NBH



2.2.4. Empirical results

Reserve requirements were among the most frequently used regulatory instruments in the countries of Eastern Europe, especially at the beginning of reforms in the early 1990s. They were employed mainly for implicit tax purposes, although it might be argued that a very restrictive level of these reserves also played a role in conducting current monetary policy. It must be noted that **the overall level of reserve requirements in Eastern Europe, which in Poland amounted to as much as 30% on demand deposits, was generally higher than the analogous level in Western countries**. For example, in 1988 the level of reserves in the EU countries varied from zero percent in countries such as Belgium, Luxembourg and Denmark through 0.5% in UK and 10% in Germany, up to 25% in Italy (Hoschka, 1993). Additionally, in some countries like Germany and France, reserve requirements are used as means of promoting certain types of banking activities as housing finance, loans for the agricultural sector, etc. Reserve requirements are lower for institutions involved in preferred types of borrowing in order to compensate them for higher risk or lower real returns.

At the beginning of the reforms in **Poland**, the level of reserve requirements varied between 5% and 15%, and was levied only on deposits in domestic currency. However, a significant increase to 30% on demand deposits and 10% on time deposits[28] was introduced at the end of 1990 in order to strengthen monetary policy. The reserves were not interest bearing,[29] although banks were allowed to meet up to 50% of their obligation by declaring cash holdings in their treasuries.[30] Although there was no open credit account for the state budget in the National Bank of Poland, NBP's profits constituted a

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[28] Additionally, there was also a 25% requirement on saving deposits (deposited mainly within state-owned PKO bp saving bank). This category was equalised with demand deposits in May 1992.

[29] Part of reserves is interest-bearing, but the interest is paid to the Agricultural Restructuring and Debt - Cancellation Fund, which acts as a semi-budget fund.

[30] Actually, on average they meet around 30% of their requirements by this mean.

significant contribution to budget revenue. Both the level of reserve requirements and the way they were introduced were widely criticised in Poland. Even in the case of significant distortions in banks' liquidity, the reserves could not be used. Banks could only rely on NBP support in the form of a refinance credit granted up to the level of reserves at the refinance interest rate. Due to the technical underdevelopment of the clearing system, reserves were calculated on the basis of the zloty asset level reported on the last day of each month. This forced banks to conduct their activities in such a way that at the end of each month they tried to minimise the value of held deposits.

In April 1992, required reserves on demand deposits were decreased by to 25% from 20%. The next change took place three months later, in July 1992, when reserves were lowered to 23%. In both cases and especially after the second change, bond yields decreased, as expected from the model described in the previous section. During 1993 and the first eight months of 1994, the required reserve level was unchanged. In September 1994, small[31] obligatory reserves on foreign currency deposits were introduced. In accordance with the model, the bond yield increased by 0.1%. The effect of the changes that took place in October 1994 were ambiguous, as the required reserves for foreign exchange deposits increased by around 0.5%, while the same measure for domestic currency demand deposits was lowered by 3%. Additionally, in the second half of 1994, some changes in the calculation and accounting of reserves were introduced in order to allow banks' reserves to be used in liquidity management. The average ratio of reserves to total value of banks' deposits dropped from around 15% during 1992-1993 to around 10% in 1994.

As there was no interest on obligatory reserves, cash flow calculation has been done on the straight basis of equation (2.13) taking as ΔR the difference in the level of reserves at the end of the last month of the given year with the last month of the previous year.

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[31] 0.5 - 0.75% of deposit value, depending on the type of deposit.

The opportunity cost of reserves has been calculated based on the equation:

$$V_2 = \sum_{m=1}^{n} i_{bm} R_{(m-1)} \qquad (2.16)$$

where: i_{bm} - monthly average bond yield for given month

$R_{(m-1)}$ - level of reserves at the end of previous month

In November 1994 a significant part of reserves was transferred into non-interest bearing current accounts of banks within the NBP. The value of reserves for November and December 1994 has been computed as a sum of banks' current account position plus the value of the reserve account.

The results of calculations are summarised in Table 2.1, where implicit tax revenue based on the cash flow and opportunity cost methods are also presented. Additionally, quasi-tax value calculated according to the opportunity cost definition is compared to the NBP dividend to the state budget.

Table 2.1 Implicit tax revenue from reserve requirements in Poland

Year	Cash flow measure		Opportunity cost measure		
	as % of budget	*as % of GDP*	*as % of NBP contribution to budget*	*as % of budget*	*as % of GDP*
1992	1.05	0.29	77.08	2.99	0.81
1993	1.64	0.48	60.97	1.88	0.56
1994	1.14	0.34	43.87	1.64	0.49

Source: Author's calculation based on NBP and GUS general statistics

In **Hungary** an 18% reserve requirement was introduced in 1989. However, it is difficult to evaluate its influence on interest rates before 1991, when the first t-bonds were issued. Previously, however, reserves on foreign

currency liabilities were introduced in the second half of 1990. Both forint and foreign currency reserves have been interest bearing. The rate of interest varies between these two types of reserves. As reserves calculated with respect to foreign currency have been maintained in forints, the interest rate on these reserves has been fixed on a significantly higher level than for the rest of the reserves, in order to compensate for exchange risk exposure. Additionally, there were sub-sector differences in enforcing the reserve regime. For example, the National Saving Bank and cooperative banks could partially meet these obligations by holding housing bonds issued by the budget.

After an increase of 1% and widening of the base for reserve calculation in the third quarter of 1991, the level of requirements remained unchanged until January 1993, when the level was lowered by 2% and the base for reserve calculation was significantly reduced. This has influenced the interest rate on bonds, which decreased significantly in February 1993. Additionally, required reserves started to be calculated fortnightly, instead of the previous monthly calculation system.

Another interesting feature of the Hungarian reserve system was the "liquidity reserves." These were introduced in the second half of 1991 and required banks to keep a specified percentage of the assets in liquid form. The required liquidity ratio in 1991 was fixed at a level of 5%. According to the National Bank of Hungary, banks met this obligation by maintaining 5.7% of their assets in liquidity. 20% of these liquid assets were held in the form of treasury bonds. However, it is difficult to estimate the real influence of this on interest rates and the cost of public debt, as no detailed data are available. Additionally, banks avoided these requirements by exchanging overnight deposits. In 1992, the regime of liquidity reserves was hardened, as only the net position of overnight deposits was allowed to be included in liquid reserves and the ratio of the required liquidity reserves was increased to 10%.

A cash flow calculation has been done according to the equation:

$$V_1 = \Delta R - \sum_{m=1}^{n} i_{fm} R_{f(m-1)} - \sum_{m=1}^{n} i_{em} R_{e(m-1)} \qquad (2.17)$$

where: R_f - level of required reserves on forint deposits

R_e - level of required reserves on foreign currency deposits

i_f - interest paid on reserves calculated on forint deposits

i_e - interest paid on reserves for foreign currency deposits

Similarly, opportunity costs are calculated as:

$$V_2 = \sum_{m=1}^{n} i_{bm}(R_{f(m-1)} + R_{e(m-1)}) - \sum_{m=1}^{n} i_{fm} R_{f(m-1)} - \sum_{m=1}^{n} i_{em} R_{e(m-1)} \qquad (2.18)$$

From September 1994 data are estimated on the basis of the banks' account value within the NBH and the previous distribution between domestic and foreign currency deposits. Table 2.2 summarises the results of the calculations for Hungary.

Table 2.2 Implicit tax revenue from reserve requirements in Hungary

Year	Cash flow measure		Opportunity cost measure		
	as % of budget	*as % of GDP*	*as % of NBH contribution to budget*	*as % of budget*	*as % of GDP*
1990	3.5	1.08	61.33	1.29	0.40
1991	9.98	3.60	102.06	1.06	0.38
1992	2.14	0.73	306.35	2.22	0.76
1993	-2.35	-0.83	230.08	1.90	0.67
1994	-2.38	-0.84	n.a.	2.07	0.73

Source: Author's calculation based on NBH statistics.

2.2.5 Comparative analysis of the results

Hungary and Poland applied significant levels of required reserves to their banking systems during the transitional periods. In **Poland**, the average level of quasi-tax revenue calculated according to the opportunity cost definition equals 0.62% of GDP for the period 1992-1994. The same ratio for **Hungary** between 1990-1994 equals 0.59% of GDP. Additionally some approximate calculation for the Czech Republic shows that opportunity cost quasi-tax revenue in 1992/1993 equalled around 0.4% of GDP.

Using an opportunity cost measure, Repullo (1991) calculated the level of average revenue from reserve requirements in Portugal to be 1.62% of GDP for the period 1980-1990. However, the value of this revenue was less stable than it was for Spain, where the same ratio equalled 0.68%. Molho (1992) estimated that the value of quasi-fiscal revenue from required reserves in Italy during the period 1981-1990 was 0.58% of GDP while the ratio of overall revenue from tax on banks' profits to GDP equaled 0.42% on average. As mentioned before, the required level of reserves in Italy was one of the highest in the whole EU, but banks were remunerated for them to some degree in form of interest on amounts deposited within the Central Bank.

Taking into account the significant underdevelopment of the financial sector in Eastern Europe, both Hungary and Poland's ratios seem to be equally high. However, we must note that in Poland and Hungary, the major part of the banking system is owned by the state. Therefore, the results of the opportunity costs calculation to some extent shows the direct transfer of wealth from state-owned banks to the budget, using Central Bank assistance. The reason for such a method of quasi-taxation is that state-owned banks can resist paying dividends to their owners[32]. By hiding or lowering profits, the management of these banks might have in mind their privatisation prospects,

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[32] This once again underlines internal contradiction between fiscal and ownership functions of the Ministry of Finance.

during which they can usually obtain a significant stake in shares. Subsequent privatisation of banks in Poland might partially explain the decreasing trend of opportunity costs-based revenue. Obviously, the other reason for decreasing pressure from reserve requirements in Poland is banks' worsening performance during the discussed period. The income from reserves decreased in real terms, as one measure of the prevention of systemic risk in the entire banking sector. Although the NBP has a high degree of independence from the Ministry of Finance, it could not resist budget pressures[33]. However, it lowered the reserve bias in the banking sector in order to maintain that sector's stability.

The case of ratios for Hungary during 1991-1994 is quite different. On one hand, the opportunity cost-based revenue was higher than the NBH's contribution to the budget. On the other hand, in 1993 and 1994 the cash flow from reserves was negative. This could be explained by observing the increasing level of subsidised interest rate credits granted by the NBH. The opportunity cost measure shows that the NBH pays a small contribution to the budget compared to its income. In other words, the bulk of income from reserves has been used for financing other banking activities. Negative cash flow means that by extracting less profit from the NBH, the budget channelled part of its activities through the NBH, probably by granting cheap credits. However, the level of opportunity cost revenue in Hungary increased slightly, which means that the government regards the financial sector as a source of additional income. This in turn might badly affect the sector as a whole.

2.2.6. Influence of the integration process

The accession to the European Community of Portugal (in 1985) and Spain (in 1986) has had a significant influence on the level of implicit taxation of their banking sectors. In Portugal, 1985 was the beginning of a four

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[33] The nominal contribution of the NBP to budget almost doubled from 1993 to 1994, while inflation was around 30%.

year period of significant decreases in reserve requirements. In 1986, Spain and Portugal had the lowest revenues from reserves for an entire decade. However, in subsequent years the level of this revenue increased in both countries. Probably this was because both countries were compelled to liberalise their financial services, which caused a decrease in other sources of tax revenue. In this situation, reserve requirements play an important role in financing the public deficit and which will not be affected by EC regulations, as will other measures related to monetary policy (Vives, 1990). Obviously, the reserve requirements will be affected by further development of co-ordination within the European Union. Competition inside the EU can restrict the influence of reserve requirements, but in the short run they will still constitute an important source of budgetary revenue. However, in the long run harmonisation with the European Union banking system will probably force Poland and Hungary to cease using this instrument. The experience of Portugal and Spain during the first years after joining the EC, when these restrictions were significantly limited in order to attract foreign financial capital, should be taken into consideration during the preparation period. This experience is also important for other Eastern European countries, which hope to attract foreign banks to provide competition in the banking sector.

2.3. Conclusions

Eastern European governments were forced by budgetary needs to implicitly tax their financial sectors. Simultaneously vast sums of money were used to recapitalise banks and get rid of the bad debt problem. This mechanism has distorted the competitiveness of the sector and put a heavy burden on newly created and foreign banks. **The perspective of EU enlargement will significantly diminish the possibility of applying reserve requirements** and

therefore the potential for banks to reduce margins and possibly prices of some services. Obviously, this would increase competitiveness of banking sectors in countries in question.

However, the macroeconomic consequences of lowering reserve requirements cannot be neglected. Alternative policies, such as open market operations, cost more to conduct in terms of opportunity costs for state budget. In long term liberalisation of trade in financial services (see Chapter 3) will force authorities to lower these reserves. Additionally, high level of reserves might be an incentive for creation of certain instruments that will allow to surpass these requirements, as already happened in Poland[34]. Therefore, national banks of discussed countries should create clear timetable of reserve equalisation, at least to the level comparable with EU standards. Clear indication of such a gradual movement will help to plan necessary budgetary adjustments but also increase attractiveness of foreign long-term investment in these countries.

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[34] In 1997 NBP prohibited sale of certificates of deposits of foreign-based banks by their Polish subsidiries. These papers could be a usefull tool to avoid reserve requirements, as they were only subject to reserves abroad.

Chapter 3. Modes of foreign entry

3.1. Introduction

A foreign financial institution in Eastern Europe is an organisation which is a legal incorporation of a foreign institution or an organisation in which a significant part of the owners has foreign origin and which perform any financial operations. Consequently, a foreign bank in Eastern Europe would be defined as an organisation performing banking functions and being the legal incorporation of a foreign institution or an organisation with a significant proportion of foreign ownership. The first part of this definition of foreign banks will therefore comprise a number of organisational forms ranging from a representative office to a branch of the bank. The main feature of this group will be therefore a special kind of legal recognition in a host country as a foreign institution dealing with financial services. The second part of the definition is related to banking institutions owned by foreign legal entities but treated as normal domestic legal entities. The only difference from other domestic banking institutions is the fact that all or some of the owners are based abroad. From the purely legalistic point of view, as mentioned in Gierszewska (1997), all entities, including banks, that pay taxes into given countries should be recognised as domestic entities. Indeed, as Aliber (1984) stated; "the choice of the boundary between domestic banking and international may vary with the question being analysed" (p.662).

It is worth mentioning that Hoschka's (1995) parallel definition of a multinational financial services corporation (MNSC) is restricted to firms that provide banking services. In his view, the fact of possession of a representative office in a given country does not implies that the owner of this office may be called an MNSC, as the representative offices: "merely serve a liaison function for a parent firm but cannot actively operate in the host market" (p.17). In the

framework presented above, this form of presence can also be called a foreign bank. The reason behind this approach is that unlike in developed economies in EE circumstances representative offices quite often tend to perform some banking functions.

The above described concept of a foreign bank is in line with the pioneering paper by Grubel (1977) on **multinational banking**. In his framework, multinational banking "involves the ownership of banking facilities in one country by the citizens of another". Three kinds of multinational banking might be performed: retail banking, service banking and wholesale banking. All of them are present under different forms in Eastern Europe.

3.2. Theory of multinational banking

One of the most important research questions is **why foreign banks wish to operate in the EE countries**. Put differently: what competitive advantages may compensate banks for operating in the risky EE environment? In order to answer this question a brief overview of the theory of multinational banking is indispensable. Such a theory was first developed by Grubel (1977) and later a considerable number of researchers tried to answer some of the questions posed in his paper[35]. One of the most frequently considered questions addressed by these theories is the attempt to identify sources of comparative advantage in multinational banking. Empirical studies such as Sapir and Lutz (1981), Sabi (1987) and Sagari (1989) recognised a number of factors that drive comparative advantage in financial services and the pattern of banks' expansion abroad. It is extremely useful to look at them in order to identify possible obstacles to foreign entry in the EE banking systems and expected features of these entry. Foreign entry in the EE banking sector is defined here as setting up

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35 A survey of these research is provided in Aliber (1984). Also see: Gray and Gray (1981).

or acquiring institutions which in consequence become a foreign bank. In addition to entry which establishes ownership links with the institution in the host country, in developed economies there are a number of other vehicles for foreign entry. The best example of this "non-ownership" entry vehicle is strategic alliance. However, the underdeveloped structure of EE financial services and an unstable economic situation do not allow most of these additional forms to be used. Therefore, the main feature of foreign entry, on which this chapter will focus, is the passage or establishment of the ownership rights attributed to foreign institutions in the banking sector. In order to discuss the influence of foreign entry in the financial sector, an overview of the theory of multinational banking will be presented. Particularly it addresses three main questions:

1. The rationale for cross-border provision of financial services
2. Identification of sources of comparative advantages in multinational banking
3. Methods and strategies of entry

3.2.1. The rationale for cross-border provision of financial services

The foreign expansion of banks was already advanced in the 19th century and accelerated after World War II. Kindleberger (1983) presents the historical record of several centuries of banks' expansion abroad. Multinational banking generally developed in two distinct historical waves. The first (mid 19th - first half of 20th century) was led by British banks. The second, post-war wave was led by American banks but also with significant participation of European banks. Indeed, as Wachtel (1995) noted:

> A major development in banking throughout the world was the dramatic growth in international banking from about 1960 to 1985. Foreign banking growth spread from Europe and the US. to Japan, the Pacific Rim and South America. In the 1990's foreign banking expansion has spread to the formerly planned economies of central and eastern Europe. (p.1).

In order to set the stage for a discussion of the cross-border provision of financial services, it is necessary briefly to describe the scope of financial services itself. As Gentle (1993) mentions, "any definition of financial services is fraught with a number of problems, due to the complexity of the financial sector[...] hence, if a serious attempt is to be made to study the industry, the approach adopted must be functional and pragmatic". For purpose of studying the effects of EU integration, Price Waterhouse (1988) defined 30 product-services[36] that are provided by different financial intermediaries. Three sectors were identified: banking and credit, insurance and securities and brokerage. According to Gentle (1993), this categorisation is relatively close to the 1968 SIC (Standard Industry Classification) for the industry. This dissertation will focus almost solely on banking services, i.e. the second row in the Table 3.1.

Table 3.1 Services provided by financial intermediaries

Service/product market	Banking & Credit	Insurance	Securities & Brokerage
Personal	Current Accounts Retail Deposits Travellers Cheques Consumer Finance Credit Cards House Mortgages	Life Insurance Non-Life	Equities Unit Trusts pensions
Corporate	Exposure Credit Loan Guarantees Leasing Venture Capital Business Loans International Lending Eurocurrency Deposits	Non-Life Employers Liability Insurance Broking Reinsurance	Corporate Finance Investment on stock market Fund Management Money Broking Bullion Broking Money Markets Offshore Exchange

Source: Price Waterhouse (1988).

[36] Each of these product-services is a set of various basic replicated services. For example current accounts product-service set contains basic payment services which are also one of the element in international lending.

Walter (1985) defines an **international trade in banking services** by simply describing elements of the banking services that might be provided in foreign countries i.e. :

- deposit taking
- trading and dealing on exchange markets
- trade-related services
- international lending
- underwriting and dealing in securities
- personal services

This list covers practically all the main points of the general banking services itself, as well as main services offered by foreign banks in EE countries. It should be noted that the list is not conclusive, as a cross-coverage of certain categories might occur - for example personal services in most cases includes deposit taking as a one of a primary activity. However, in most cases banks operating abroad focus on corporate services with whole range of activities and specialised employees for each of them, while personal services are usually offered by just one department combining know-how linked to different products. Actually, it is difficult to imagine any banking services that might not be transferable abroad, even taking into account differences in consumers' tastes and habits. Obviously some of them, for example home banking, require certain technical equipment, and some are only economically feasible on a certain level of minimum scale (for example, establishment of a computerised clearing system). Nevertheless, virtually all can be easily internationalised.

In order to answer question related to rationale of foreign expansion, trade in financial services has to be discussed, as it differs

significantly not only from "normal" trade, but also from the general pattern of trade in services, and therefore this can affect the pattern of investment in the financial sector.

Banking, by its very nature, belongs to services. Sapir and Lutz (1981) point out that there is in general much less literature on trade in services than on trade in goods. The reasons for this are the neglect of the influence of services on the balance of trade, lack of adequate data, and an a priori opinion among the researchers that the determinants of trade in services are not economic in nature or are essentially the same as for goods. The main difference, according to United Nations (1994), between the trade in goods versus trade in services is that **goods might be manufactured in one place and then supplied to the consumer somewhere else, while trade in services implies the consumer's geographic proximity**. This approach underlines the possibility of the existence of a specific gap between the producer and consumer taking part in the trade in goods. For services, however, at least some indirect form of contact between the consumer and provider must take place. The same relates to financial services.

Sapir and Lutz (1981) identify the pattern of services that are 'internationally tradable'. With limited exceptions, services are traded in response to an intermediate rather than to final demand. This means that 'internationally tradable' services are mainly producer rather than consumer ones, i.e. in banking corporate services rather than retail ones. One general **reason for service providers to internationalise their activities is to sustain their activities in outside markets given a lack of effective demand at home**. The expansion in outside markets might take form of international service transactions or international service activities. The first corresponds to typical international trade, while the second require the establishment of some form of commercial presence abroad. However, due to recent developments in IT

technology, banking services can be easily provided without physical presence in the market. Still, the question of scale and scope of operation exists, as for wide IT applications, a certain "critical mass" is needed to cover fixed costs.

In line with this concept, Gelb and Sagari (1990) define **trade in financial services** as two general types of activities:

1. The provision of financial services by an institution in one country to a consumer of those services in another country (i.e. provision of services across borders).
2. The provision of financial services through the establishment of subsidiaries, branches or agencies in a country different than its own home country (i.e. trade associated with investment).

Historically, the second type of provision has dominated the conduct of international banking activities. Hoschka (1993) argues that recent advances in communication and information technology have caused a significant shift from the group of services that previously required physical proximity into the group of services that can be provided at a distance, even across national borders. This has occurred particularly in those financial services that distinctively benefited from advances in technology. In the EE countries corporate and foreign trade banking services benefited from this immediately after foreign banks' arrival. Later on domestic banks took a lead in introducing IT technology in the area of retail services.

For the purposes of the General Agreement on Trade in Services, GATT (1994) proposed a distinction between four more narrow means by which services can be traded:

- cross-border supply
- consumption abroad

- commercial presence
- presence of natural person.

Cross-border supply and consumption abroad are therefore wider descriptions of cross-border provision of services. Similarly, a commercial presence and usually the presence of a natural person are linked to the trade associated with investment.

For the trade in financial and particularly banking services, the provision of cross-border supply and commercial presence seems to be most important. The provision of a presence of a natural person seems to be less valuable for the consumers in a given country. Provision of consumption abroad, with rare exceptions, also tends to be less advantageous than the first two provisions, especially if, as in EE countries, it is still administratively more restricted than in other OECD countries.

Montgomery (1991) underlines the distinction between different characteristics of the banking services that can be offered at a distance and those that require a physical presence in an area close to the customer. The first are highly standardised and most of them take place in a closed circle composed by banks and big international firms, rather than banks and small firms or households. He proposes to use the "normal trade in goods approach" to analyse the pattern of trade in services that can be offered at a distance. In such a case, under the condition of the lack of externalities, free trade seems to be the optimal solution. The pattern of trade will depend on comparative advantage, and can be easily explained by standard trade theories. As long as perfect competition and lack of externalities conditions hold, international banking can only increase welfare. However, this result might be different if banks are imperfectly competitive or any externalities arise. Then a role for economic policy

emerges. It is usually perceived that the imperfect or even monopolistic competition prevails in the banking sectors of EE countries.

Wachtel (1995) notes that generally **banking is less internationalised than manufacturing.** This is due to two factors: the nature of banking as a service and a high level of concentration that creates significant barriers to entry. Additionaily, a large share of state ownership with banking sector may contribute to a non-competitive environment and discourage new entrants. This clearly is a situation of EE countries.

3.2.2. Sources of comparative advantages

In his paper Grubel (1977) stated that the basic analytical question to be answered by a theory of multinational banking is identical to that present in the case of direct foreign investment: What is the source of comparative advantage?. By identifying sources of comparative advantages in financial services we are able to say more about the "supply" side of this trade and potential FDIs in banking. Particularly, this should allow us to pinpoint the countries (or possibiy institutions) that, by possessing certain comparative advantages, will be involved in expansion abroad. In Aliber's (1984) words:

> The central question of theory of direct foreign investment can be applied in international banking industry to determine whether the ownership pattern of internationai banks is random or systematic with respect to the size or number of banks headquartered in different countries. (p.663)

Casson (1990) considers whether the economic motives for the 'multinationaiisation' of banking are the same as those for manufacturing. In his opinion, there is "a small number of possible motives for multinational banks which are analogous to similar motives operating in manufacturing" (p.15). He argues that horizontal and vertical integration does not matter too much in

banking. The form of bank which "replicates self-contained domestic banking operations in different countries" is vary rare. Monopolistic advantages in banking are usually not linked with technology but rather with personal contacts, firm's goodwill and information. Some monopolistic advantages might be also drawn from exclusive rights to certain activities or locational advantages. Other kinds of advantages are caused by cultural and political handicaps such as business friendly socio-political environment in the given country. Banks may also be encouraged to go abroad if their reputation is established on the basis of the country's image (i.e. Switzerland). Relating this to transforming countries, one should notice that foreign banks are usually perceived as "better" banks that domestic ones.

Sapir and Lutz (1981) consider various international trade theories in order to explain the general pattern of trade in services. In order to test the relevance of a given theory, they establish a model that tests the significance of certain factors for trade in services. They found that the most significant **factors influencing trade in services are human resources endowment and returns to scale**. However, a significant volume of trade remains unexplained.

Dealing exclusively with financial services, Hoschka (1993) looks at the trade in these services from a simple Ricardian perspective:

> For a comparative advantage explanation of international trade in services we need to search for factors which convey a relative cost advantage on financial services firms in one particular country. (p.79)

In this framework **the main sources for such advantages may result mostly from lower operating costs or access to cheaper funds**. This reflects, in fact, two main elements of the production function i.e. the parameters of production function and input costs. If we assume that in EE countries input

costs are similar across banking system, then the main feature that should be investigated are the parameters of the production function. The assumption of similar input cost might be justified by the fact that foreign banks may enjoy lower cost of "imported" inputs (such as foreign currency deposits). However, due to low number of branches, they have to rely heavily on large customers and interbank market which are more expensive sources of deposits.

Sagari (1989) analysed the influence of a country's resource endowments on its net trade in these services. In her view, the pattern of trade in financial services is assumed to be determined by the law of comparative advantage. In this framework, she considers three types of hypothetical countries: Country A which is richly endowed with highly trained bankers and managers, Country B with capital and Country C with arable land. Departing from classical Heckscher - Ohlin model and relaxing the assumption of identical technologies across countries, she builds up an empirical model to find which factors contribute to a higher volume of trade in financial services. According to the Rybczyński theorem, an increase in the supply of factors determining the comparative advantage will lead to an increase in the output of the products which require use of these factors. Four variables describing resource endowment were used in Sagari's model "along the line of traditional research in the determinants of comparative advantage in goods" (p.8). These were: net capital stock, arable land and two measures for skilled and unskilled labour. Trade in financial services (TF) was measured in terms of export and import. The value of dollar loans plus deposits offered to the outside world were treated as an export for a given country, while imports were assumed to be equal to the value of loans and deposits drawn on banks in the other countries. Net trade was defined as the difference between export and import.

The estimated form of equation looks as follows:

$$TF_j = g_0 + g_1 ZC_j + g_2 ZSL_j + g_3 ZL_j + g_4 ZAL_j + g_5 B_j + u_j \qquad (3.1)$$

where endowments included are:

C - capital

SL - skilled labour

L - unskilled labour

AL - arable land

Additionally, the balance of goods and services is included as an independent variable. For each resource endowment (E) of a country j, $ZE_j = E_j/d(j)$, where d_j reflects the country's level of technological development measured by the ratio of expenditures in research and development to GNP.

Estimates from a cross-sectional weighted least-squares regression, using 1977 data for 44 countries, indicates that **skilled labour is a source of comparative advantage in financial services**. The measure of goodness of fit of her model ranges from $R^2=0.4$ to $R^2=0.78$ in a case of a application of squared adjustment function of technological development. **Larger endowments of arable land and capital are identified as a sources of comparative disadvantage**, as increases of both are absorbed by the agriculture and manufacturing sector respectively. Using a general equilibrium approach, one can expect thus that an increase in capital supply will result in a decrease of the trade in financial services. The impact of unskilled labour is less clear. Applying these results to EE countries give ambiguous results. On the one hand, advantages from the comparatively high volume of skilled labour forces should balance with disadvantages linked to arable land endowment. On the

other hand the level of capital endowment is rather small and therefore will affect in import of financial services.

However, Sagari's (1989) approach has two main deficiencies, apart from the fact that it covers overall financial services without distinction for banking and other activities. Firstly, it does not take into account trade barriers created by a number of countries. Secondly, for the purpose of our analysis, it does not explain the pattern of the trade in financial services. The identification of the sources of advantages allows us only to determinate countries that might be possible exporters or importers, i.e. suppliers and purchasers of the financial services. This does not say much about possible forms of this trade, that is whether it will occur in a form of provision of services across borders or in a form of trade associated with FDI.

Similar effort to determine the cross-country, and cross-state in the case of USA, exposure to financial services has been undertaken by Goldberg *at al.* (1989). They results suggest that **level of financial sector internationalisation, measured by the volume of foreign assets is positively correlated with country import, while negatively with its export**. Variables such as GDP per capita, foreign debt or saving rate seems to be less relevant. However, the volume of foreign assets seems to be significantly affected by the tax regime of a given country, with tax havens offshore centres attracting high volume of these assets.

In the framework of Arndt's (1988) paper, trade in financial services is distinguished from international capital movements, direct investment in banks and other institutions and growth of international financial centres. Therefore, this approach attempts to explain primarily international differences in the level of two IMF categories, cross-border interbank claims and cross-border bank credit to non-banks. Although his analysis was performed on a very descriptive basis, he identified economies of scale and technological advances as a main source

of comparative advantage. This once again leads us to production function features, as discussed above and in Chapter 1. Additionally, a number of distortions, such as monetary policy or regulations, may affect trade in both directions (increasing or decreasing its volume).

3.2.3. Motivational factors

This section will focus on the question of factors driving the entry of foreign banks. It is assumed that entry is the effect of a perceived demand for banks' services. Therefore I will investigate the nature of this demand and describe possible modes of physical entry, leaving aside the possibility of providing banking services at a distance and the question of whether any providers of such services are available. The set of conditions for FDI in banking is also a key issue here, because as long as they are not satisfied, one cannot expect a significant inflow of foreign institutions. The main question here is **which particular location may attract foreign banks and why?**

However, it is first necessary to distinguish between capital flow and foreign entry to the banking sector of a country. Due to the peculiarities of banking services, at least some form of personal contact with customers is needed. This requires the physical presence of a given bank on place. Therefore:

> Even though the need for a bank to be physically present in the market abroad diminishes as new communication technologies are developed [...] capital account liberalisation in banking and FDI in banking are [...] imperfect substitutes. (Buch, 1996, p.10)

Pintjens (1994) makes another useful distinction between **"inward" and "outward" internationalisation**. The first describes a situation either where foreign banking institutions settle in a country or region, or when the

banking activities of a given geographical area are expressed mainly in foreign currency. "Outward" internationalisation takes place when the banking institutions of a given country establish a strong presence in other countries. This set of measures may be used to compare the internationalisation of banking sectors on both levels. Nevertheless, in the case of EE countries, only a low level of outward activities by domestic banks will occur, while the level of inward internationalisation can be quite high even by international standards, as in Hungary with more than 50% of banks' total capital in foreign hands.

Aliber (1984) describes two main sets of issues in the analysis of the international banking. One set focuses on industrial organisation issues and tackles patterns of banks' expansion abroad, while the second set examines the role of banks in cross-border and cross-currency financial flows. In this context, we will focus on the first issue as it relates more closely to the reasons for FDI in banking.

One can predict that foreign ownership will develop for the finance of trade, either in newly - opened territories where reliable correspondents are difficult to find, or in well - established territories with which there is a very large volume of trade. However, this scenario is related only to the case of sudden liberalisation of a near-autarky economy. It does not relate to questions of entry in an already matured, or in semi-matured markets that are also attractive places to enter. Therefore, as quick growth of EE economies takes place, we should look also at a number of other factors that might explain expansion of banks abroad. However, "a major problem in developing inferences about the patterns of international expansion of major banks arises because of inadequate data" (Aliber, 1984 p.666). This is one reason why a number of prescribed theories have not received proper empirical evidence and are difficult to test empirically.

Gray and Gray (1981) use Dunning's classical eclectic FDI theory and apply it to banking. In this framework, they check for the applicability to banking of six main conditions which give rise to FDI:

a. Imperfections in product market
b. Imperfections in factor or input market
c. Economies of internal operation
d. Preservation of established customer accounts
f. Entry into a growing or high-growth market
g. Ensuring control over a raw material sources.

The first three of these conditions relate to internalisation efficiencies, while the remaining three are linked with location-specific advantages.

Imperfections in product market are mainly caused by barriers to entry and market segmentation. Therefore, this particular condition might be an incentive for direct investment in foreign banking as long as a given investor is able to gain market access. If it is successful, than some quasi-rent might be extracted until full liberalisation and removal of barriers takes place. This was clearly a case of early foreign entrants into the EE banking sectors, as they were able to accumulate vast profits and gain significant advantages over late-entrants.

Imperfections in factor or input markets are closely related to the issue of comparative advantages in financial services. Institutions enjoying such advantages will always be interested in expansion, as they can benefit from their country-specific or firm-specific advantages. For example this might involve easy access to cheap governmental funds, as in case of German Landesbanks. Due to this imperfections in factor market, these banks are able to expand their

activity even in case of when such an expansion would not be profitable in normal circumstances.

Economies of internal operations, mostly economies of scale, are very firm-specific advantages, although due to the different environment in a targeted country they might vary significantly in other locations. However, in banking there is a great level of adaptability and therefore it can be expected that banks enjoying such an advantages home will be also able to some extend exploit them abroad.

Preservation of already established customer accounts assumes customer expansion abroad, in whatever form, and as a result customer-following or customer-leading behaviour appears among banks.

The aspect of **entry into growth market**, is quite obvious - it creates possibilities of an additional increase in profits, that are often hard to achieve in highly competitive domestic markets.

The last condition, **access and control over raw materials**, can be perceived as a desire to establish a stable, multicountry and multicurrency customer base that allows accommodation of local shocks. Moreover, some of these conditions are not necessarily linked to a particular location. In the case of Euromarkets, banks were seeking the higher rates of return and deposit base which were available in unregulated markets. However, judging by empirical evidence (see section 3.3), we may conclude that all these conditions were taken into account by foreign banks while preparing their expansion in EE countries.

The other approach in investigating firms objectives to multinationalise was developed by Healey (1995). Although applied to the industrial companies, it distinguish between **cost-oriented and market-oriented patterns of expansion**. Cost-oriented multinationals exercise vertical integration i.e. integration aimed at securing cheaper or more scarce inputs into their

production. Market-oriented firms' expansion is motivated by the promise of new markets and greater sale. Thus, cost-oriented strategy is similar to the internalisation efficiencies motivation, while market-oriented objectives sureiy converge with location-specific motivation.

In general, according to Walter and Gray (1983), the main reason for direct investment in banking is a perceived need for direct contact between banks and clients. Therefore the question of choosing a proper vehicle for such an entry emerges.

Two forms of entry should be distinguished, as Hoschka (1993):

1. *Greenfield* entry, which involves the establishment of an institution from scratch. The established institution might require capital infusion, but in some cases (representative offices or branches) this transfer is very limited or even replaced by the transfer of human capital (for example when a given individual performs representative functions).
2. *A control acquisition*, when some shares or other form of firm's capital is purchased. The size of this purchase is not limited and can range from acquiring 100 percent of the capital of a given institution to a very minor share.

In this thesis framework a bank with any trace of foreign ownership will be treated as a foreign bank. The main reason for this is clarity and consistence of this approach. Additionally, it allows us to investigate relations between the level of foreign involvement in a given bank and its performance and characteristics. This approach is wider than the approach often

adopted by regulators, who tend to establish certain thresholds (most often 50%) in order to distinguish between foreign and domestic-owned banks.

From the institutional point of view, foreign entry is associated with establishment or acquisition of one of the following organisational structures:

1. Representative office
2. Bank's branch office
3. Subsidiary Bank

These "institutional" vehicles for entry have different levels of attractiveness for various types of banks. For example, specialised banks such as investment banks will tend to operate through a number of representative offices, or may even establish a non-bank firm. The reason for this is that they usually do not conduct typical banking activities (at least in the host country) that require a banking licence. Regulators tend to treat banks as special entities when they are conducting typical banking activities i.e. deposit collection, money transmission, etc. As risk of default linked with these activities is high, special procedures for potential providers of services are inevitable. When operations are limited only to some advisory and representative services the risk is lower and thus regulation becomes less important.

3.3. Entry into EE banking sectors - evidence from a survey

In November 1996 questionnaires (see Appendix 3) were sent out to headquarters of 70 banks (list in Appendix 3, section A3.2). They included eight main sections covering issues related to entry, organisational features and outlooks. Banks were identified on the basis of their already existing investment in Eastern Europe or an announced investment under consideration. Some of

selected banks were identified on the basis of their interest in the region that did not necessarily mean establishing a subsidiary or branch. Generally, investment banks and banks operating only through representative offices were avoided. The banks were located mostly in Western Europe, however a small representation of US and South Asia banks was provided. "Interregional" investors (i.e. from other EE countries) were omitted, as their pattern of investment is usually different from the same of Western banks.

Each questionnaire was accompanied by a letter explaining the aims and importance of the survey (see Appendix 3, section A3.1). In a few cases, when it was possible to identify the appropriate person, letters were addressed directly to the officer in charge of EE operations. In other cases, they were addressed to the "Director of the Foreign Branch Network" or in the case of smaller banks and banks without subsidiaries in EE countries, to "The President". Additionally, at the end of each form a promise of return of final results was given as an additional incentive. To provide a response to interest in these results the respondent was asked for identification, with further assurance of confidentiality.

Apart from yes-no and open questions, respondents were deliberately asked to provide their opinions on scale of 1-4 that does not allow ambiguous "indifferent" answers. Some of the respondents surpassed this by inventing their own 2/3 grade, but such a scale formulation was assumed to be necessary in order to clarify and sharpen their view and the results obtained.

The were three main tasks of the questionnaire. The first was to attemp to investigate banks' motivations for investment in EE countries (questions 1 and 2). Secondly, it collected opinions about the attitude towards their entry encountered in the given (i.e. Poland, Hungary and Czech Republic) countries and about situation on these countries' financial markets (questions 4,5 and 7,8). Finally, questions 2,3 and 6 were designed to obtain more detailed

information on the organisational features of banks' subsidiaries, while simultaneously trying to achieve this without breaking the "confidentiality barrier" which could diminish the rate of response.

Out of 70 questionnaires sent, 14 banks replied and all questionnaires were used for further analysis. This gave a rate of response of 20%, which is in par with similarly constructed mail surveys (Konings and Janssens, 1996). However, a number of activities that could potentially have increased the rate of response, such as phone follow-up was impossible. Out of 14 banks, 7 requested the final results.

Obviously, such a low rate of response has significant implications. Primarily, all results should be treated as providing an overall opinion of the foreign banks, rather than constitutiong a representative survey of their attitudes. Secondary, the size of sample, apart from giving average results, does not allow the use of any statistical techniques for further analysis of these results. Thirdly, as pointed out in O'Farrell *at al.*(1995), there is a number of problems associated with the usage of questionnaires in the investigation of issues linked with internationalisation in services, particularly in banking. Nevertheless, as described in Chapter 3 and 4 the results of this survey can be a useful tool for discussing features of foreign investment in EE banking sectors. Additionally, some features of the results (for example, the significant differences in the averages of answers to question 2b) allows the belief that they are close to the actual situation.

One of the main tasks of the survey was to **identify reasons and main strategies for foreign banks' entry into EE banking systems**. Three main questions addressed the following issues:

a. reasons for entry (question 1)[37]

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[37] For full questionnaire see Appendix 2.

b. institutional mode of entry (question 2)

c. areas of main activities (question 6)

Additional questions were linked to the organisational features of the subsidiary (question 3), possible branch expansion (question 4), and expected results from investment (question 7).

3.3.1. Reasons for entry

The **most important reason for expansion is the perceived need for support of the client base** that is, exploiting one of the location-specific advantages, as described in section 3.2.3. This means that "follow the client" behaviour remains the most important factor shaping attitudes towards new investment projects. As Daniel Wood, director of Bank America in Poland stated: "We have arrived to Poland as there were our clients here"[38].

One can expect that the number of banks opening subsidiaries in EE countries will be positively correlated with the volume of FDI originating from the home country. Additionally, taking into account a strong showing of the significance of trade volume (third place in ranking) one can anticipate **the expansion of EU banks, especially from neighbouring located EU countries**. In fact, Austrian and German banks were among the first to enter EE countries, and currently are represented in the largest numbers, including banks that are usually not perceived as very multinational banks, such as the German Landesbanks or Raiffeisen Bank from Austria. Other EU countries have much lower representation in EE banking. **Existing involvement is generally by the most multinationalised banks in each country**, for example Societe General and BNP from France and BBL and Krediet Bank from Belgium. In the future, as the level of intra-EE cooperation increases, this consideration might also drive

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38 Interview of D. Wood by A. Słojewska in "Rzeczpospolita" 6.01.1998, p.16.

significant intra-EE investment in the banking sector. The first signs of this are the Czech Union Bank's take-over of Polish Bank Przemysłowy, and Gazprom Bank's expansion in Hungary (section 3.4.3).

Table 3.2 Ranking of main motivations for entry according to factor's level importance

(1 - not important at all; 2 - not important; 3 - important; 4 - very important)

Rank	Factor	Average score
1	Supporting client base	3.46
2	Looking for new business opportunities	3.32
3	Supporting trade finance	2.85
4	Meeting the competition of other banks	2.33

Source: Author's survey. Other reasons given by respondents were: trading debt and equity securities (1 respondent), support and develop local client base (1 respondent).

A slightly lower level of importance (except in the case of Hungary) is attributed to one of the factors related to internalisation efficiencies, the **drive toward new business opportunities**. The reason behind such a drive is a perceived advantage over competitors caused by some inter-organisational features of a given bank. This explanation might be useful for trying to find a rationale for the expansion of US (Citibank) and Dutch banks (ING, ABN Amro) in the EE region. Although their investments might also be partially attributed to the reasons mentioned above ("follow the client" hypothesis), after the setting-up phase they tend to develop their services using a local customer base and compete directly with domestic banks.

In the case of Hungary, the factor associated with the search for new business opportunities is on average slightly higher (by 0.02) graded than the follow-client factor. One reason for this might be that Hungary is the leading

country in EE region in terms of FDi per capita and thus can be viewed as the most stable and advanced economy in the region. Moreover, reforms in the Hungarian banking system started earlier than in the other countries examined here (see Chapter 1). Therefore, we can formulate the hypothesis that along with the economic development of other countries **the significance of "follow-client" rationale for foreign entry in banking will diminish and subsequently be replaced by search-for-client behaviour.** If we assume that competition increases simultaneously, from purely operational point of view this will result in the stagnation of the number of transactions with subsidiaries of foreign firms, and growth in operations conducted with host-country firms. The same relates to trade-related services, as during the first phase of foreign banks' expansion in EE countries they were able to gain from imperfections in the product market by offering better and more developed trade services. For example Citibank Poland in 1995 was the 20th bank in Poland in terms of the value of own funds (161 mln PLN) while second in terms of servicing foreign trade (approx. 4.5 bln USD turnover)[39]. More recently, trade finance products become widely available from a number of domestic banks, as a result of "learning by doing", quality progress and technology transfers in this area. This obviously does not mean that foreign banks cannot still use some of their advantages in servicing trade, but although more sophisticated products like factoring and pre-financing of trade are often very profitable, they cannot generate as large a turnover as the basic ones.

The desire to meet competition is a less significant factor for entry. This might be explained in two ways. First, the EE countries can be viewed as relatively marginal emerging markets, with a low ability to contribute significantly to overall profits. In such circumstances, competitive pressure becomes less important, as profit-taking is very restricted. Thus, if this

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[39] Data based on "Rzeczpospolita" 10.04.96 p. 20 and 23.04.97 p.22.

hypothesis is true one, prevalent strategy will be "enter and wait", as these markets might create a number of opportunities in the future. Secondly, and more probably, the level of competition from other foreign banks, as well as within EE countries from domestic banks, is very limited and therefore not regarded as an important factor in the entry process.

3.3.2. Institutional mode of entry

According to the survey, **the most appealing vehicle of entry into EE banking is through setting up a subsidiary**. However, in the case of Hungary, a similar result was achieved by a strategy based on take-overs of existing banks. For the Czech Republic, the prevalent strategy is entry by setting up a branch. These results should be interpreted as mirroring existing opportunities and regulations. Hungary was in fact the first country in which the foreign share in total banking sector capital exceeded 50% and in which the State consequently sold all of the largest banks into foreign hands (see Chapter 1). The Czech Republic, in turn, adopted a very liberal strategy towards foreign branches. By mid-1997 there were nine branches of foreign banks operating in the country, while there were three in Poland and zero in Hungary. An additional explanation for the higher acceptance of investment into existing bank in Hungary can be linked with the dominating pattern of answers for the previously mentioned survey question (section 3.3.1). As the main motive for entering the Hungarian market is a search for new business, a branch network becomes indispensable. A branch network allows banks to deal with a larger number of smaller, local firms and also to operate in the retail market. Therefore we can expect that over time a take-over strategy will become more important in countries other than Hungary, and that some acquisition activities should occur. However, the general attitude toward the take-over of domestic banks, apart from in Hungary, is characterised by suspicion and reluctance. One respondent

put a comment on this point as "skeletons in the closet". Even the deepest due diligence will never give a full view of the purchased bank because in EE circumstances, banks' relatively short history means that the probability of there having hidden bad debts, defaulted guarantees and so on is much higher than in the traditional, matured banking systems.

Table 3.3 Ranking of entry methods according to the level of their relevance

(1 - completely not relevant; 2 - not very relevant; 3 - quite relevant; 4 - the best method)

Rank	Method	Average score
1	Subsidiary bank	2.9
2	Take-over of existing bank	2.51
3	Setting a branch	2.4
4	Minority shares	1.88
5	Representative office	1.86

Source: Author's survey. No other method was quoted by the respondents.

Minority interest and representative offices appear to be less popular institutional modes of entry. However, it must be underlined that by definition, the survey was sent primarily to banks that had already undertaken serious commitments to investment in EE region, while portfolio investors were not intensively surveyed. Thus, the results may be biased towards more advanced vehicles of entry. Setting up a representative office is a prevailing strategy among a number of investment banks as well as some specialised banks, such as export-import and development banks. Acquisition of minority shares which will be sold later is a typical tool of medium-term portfolio investment. Obviously, there are a number of exceptions from these rules, mostly prompted by risk perception or regulation barriers. For example, a number of foreign banks kept their representative offices in Poland throughout the period of licence moratorium (section 4.3.2) and later established their

subsidiaries based on these offices when it became legally possible. Investment in minority shares might on the other hand be caused by a strategy of a gradual increase of commitment in case of good financial results.

An interesting example of a minority investment strategy is the **pattern of EBRD transactions in the region** (see the case study of MKB Bank). On the one hand, the EBRD presence encouraged other prospective strategic investors. On the other hand, on disposal of these investments the EBRD was very keen to get the highest possible price for its shares[40], regardless development banks "mission", and by doing this often hampered the process of EBRD withdrawal and taking over control by strategic investors.

The results presented above are similar to those obtained by Pye (1997) for manufacturing sector FDI in East European countries. The easiest available vehicle for entering a host country is used with the least amount of risk and exposure in order to gain first hand experience of the EE business environment. As time passes and the market develops, foreign banks exert their control via either an increased level of ownership or additional investments.

3.3.3. Areas of activity

Among the eight areas of activities covered in the survey, the **most important one is corporate financing**. Two types of activities linked with trade services - foreign exchange trading and trade finance - also receive average grades between "important" and "very important". The fourth type of activities - project financing that complements corporate financing - was on average graded as "important". We can conclude that **providing services for large firms and servicing trade remains two of the most important areas of activity for foreign banks in the EE countries**. Both of these functions are compatible with

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[40] In case of EBRD minority interest in WBK, reported final price, after 3 years was said to be 4.5 times higher in real terms than primary value of investment. This means more than 100% rate of return per year.

the declared main tasks of these banks, supporting trade finance and looking for new business opportunities. These opportunities are expected to arise from the group of large, institutional customers rather than from cluster of the SMEs or individual customers.

Table 3.4 Ranking of activities according to their level of importance
(1 - not important at all; 2 - not important; 3 - important; 4 - very important)

Rank	Activity	Average score
1	Corporate financing	3.62
2	FX trading	3.22
3	Trade finance	3.1
4	Project financing	3
5	Dealing in securities	2.48
6	Non-finance activities	2.38
7	Leasing	2.17
8	Retail activities	1.95

Source: Author's survey. One respondent added one additional category: cash management.

Retail activities are perceived as being the least important, with average scores lower than the "not important" grade. This means that entering banks do not adopt a retail strategy in these markets[41]. The main reasons for this might be the low level of individual wealth, as well as high set-up costs in this submarket. Judging from additional evidence, there are only few cases of direct (Citibank) or indirect (ING - Bank Śląski, ABN Amro - MHB) activities of foreign banks in the area of retail services. However, in the long-term perspective the retail market will became more and more attractive and foreign banks are expected to enter this area in greater numbers.

Other activities which complement core corporate services are non-financial services such as consulting, security trading and leasing. These allow banks to use their know-how and liquid resources to earn some extra

41 For a wider description of retail strategy, see Tschoegl (1987).

income. However, as there are a number of specialised non-bank institutions in these areas, these areas of activity are treated as a "windows of opportunity" rather than directions towards which banks should concentrate their resources and efforts.

3.3.4. Organisational features

Two main issues in the area of organisational features were tackled by the survey. As it was expected that this area could be "sensitive" for the respondents and as such may decrease the rate of response, these questions give only a very fragmented idea of complex the issues associated with running foreign banking subsidiaries in Eastern Europe.

The first question addresses the level of autonomy of the EE affiliates (question 3 in the survey). 36% of respondents stated that their regional affiliations are largely run in place. 45% assessed that a significant proportion of decisions is taken by headquarters, while 18% agreed that the EE branch has a decision power only with regard to day-to-day operations. Based on this we can conclude that the regional affiliates exercise a relatively low level of autonomy. Reasons for this could include a lack of proper staff and the risk associated with running these institutions. Additionally, close scrutiny may be required because a widespread preconception that the banking environment in the Eastern Europe is corrupt. Therefore, maintaining close control over decisions allows headquarters to prevent some of the risks associated with these externalities. However, this close control might in fact also cause lower flexibility, as the decision process takes longer and in some cases local circumstances may not be taken into account at the higher decision-making level.

The second question from this block (question 4 in the survey) is intended to be a dummy question addressing further expansion patterns. The reason for formulating this question this way was to avoid banks' possible

reluctance to answer a question formulated as "Do you expect to open more branches in the EE countries?". It was therefore assumed that if the specific country is perceived as underbranched then more branches of affiliated foreign banks will probably be opened.

In fact, Hungary (70%) and Czech (64%) are viewed as overbranched countries, and Poland as a relatively underbranched one. Combining this with a real measure of branch density (Chapter 1) we can conclude that in the Hungarian case there is a rather relatively high level of competition that causes this country to be perceived as overbranched. The number of inhabitants per branch[42] (around 13 000) is similar to that one in Poland (around 11 500). In the Czech Republic branch density is much higher, at slightly more than 4 000 inhabitants per branch. As the retail sector is neglected by foreign banks, the most decisive factor in the decision to expand the number of branches is the level of competition, and probably also the availability of telecommunication services. In the area of corporate finance, banks rely on these services more heavily than in the provision of retail services.

3.3.5. Outlook

It was unanimously agreed by the respondents that they **expect a profit contribution from their EE branches to increase** over the next five years. This optimistic factor also has a strong showing in the next question. The expected time of investment return was roughly the same for each of the host countries and varied around three years, which means an average rate of return higher than 30%. This rate is probably based on experience of already set-up branches rather than current results. This is because a number of late-entering banks have recently suffered negative results during their first year of activity, mostly due to high set-up costs and a very competitive environment.

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42 Data based on ING Barrings (1996).

3.3.6. Summary - main strategies

Table 3.5 contains the list of the highest rated elements of the entry approaches adopted by foreign banks with respect to each country. Common features of these approaches, which add up to specific "strategies of entry", for all examined countries are:

- regarding corporate financing as the most important field of activity;
- an expected growth of profits in a comparatively short time horizon in each location.

For **Poland**, the prevailing entry strategy is to serve mainly joint-venture clients and to base expansion on full-fledged subsidiaries. Banks tend to concentrate on their existing client base, and are reluctant to invest in privatised banks, even taking into account that Poland is relatively underbranched. The expected period of investment return is comparatively longer. Combined with the issues outlined above, this means that local client base is perceived as contributing relatively low profits. This explains some of the features of foreign banks' expansion in Poland, as described in Chapter 1.

In the **Czech Republic**, an entry strategy similar to that in Poland is preferred, although because of a more liberal licensing policy, branches become the most desired vehicles of entry. According to the survey results and the finding presented in Chapter 1, the banking sector as a whole in this country is characterised by overbranching. Foreign banks tend to adopt " enter and wait" approach as this appears to be only viable solution, as competition from domestic Czech banks is viewed as the toughest of all the countries in question, and the possibility of take-overs is restricted due to unclear ownership links and

lack of effective privatisation of the main banks. The results of the survey for Poland and Czech Republic, and partially for Hungary, confirm von Brabant (1997) hypothesis:

> External interest in engaging in banking operations, other than those required for FDI and ordinary foreign trade, during the initial phase of transformation is restrained in part because their risk aversion is arguably even larger, given the uncertainty in postcommunist economies in transition and their unfamiliarity with doing business in these countries. (p.167)

The **Hungarian** banking sector, is the most mature, offers a number of opportunities for foreign banks. The wave of take-overs of local banks allowed foreign banks to adopt a more aggressive strategy, characterised by the willingness to search for new business as well as an expectation of relatively short period of investment return. Finally, it is worth stressing that the overwhelming majority of questioned bankers expect an increase in profit contribution from their EE affiliations.

Table 3.5 Prevailing elements of entry strategies and country characteristics

	Poland	*Czech Republic*	*Hungary*
Reason of entry	Follow client	Follow client	Search for new opportunities
Method	Subsidiary	Branch	Take-over
Activity	Corporate Financing	Corporate Financing	Corporate Financing
Branching	underbranched	overbranched	overbranched
Profit growth expectation	yes	yes	yes
Period of investment return	3.12 years	3 years	2.5 years

Source: Author's survey. Table lists highest rated or dominant answers for each question in the survey. Period of investment return is given as an average of answers.

3.4. Entry determinants

In order to complement the survey findings a more "rigorous" approach will be applied, i.e. an ordinal logistic regression. This approach has been selected because the dependent variable presents a binary ordination. The dependent variable will be given the value 0 for banks which are not present in at least one of the three examined countries (Poland, Hungary, the Czech Republic), and the value 1 for those banks which have entered a given country.

Additionally, the results produced by logit model will be compared with an OLS estimation, as Ball and Tschoegl (1982) have proved that this methodology is equivalent to linear discriminant analysis and may provide better results than a logitmodel. It will be hypothesized that the dependent variable (the binary choice of entry) is positively related to:

1. Size (**ASE**);

Banks require a minimum size to develop an international presence. Significant resources are necessary to absorb fixed setup costs, marketing expenses, and so on. Additionally, large banks are perceived to be able to exploit increasing returns to scale (Molyneux *et al.*, 1996) and to search for business opportunities worldwide. Therefore, the total value of assets will be used as a measure of size and as a proxy for all the bank-specific advantages which are assumed to be correlated with size. Data for the calculations will be taken from *The Banker* Top 1000 list for 1996, which provides data on the largest banks in the world.

2. The volume of trade between the given countries (**EXP, IMP**);

It is assumed that because of the lack of reliable banking partners and low standards of operations, banks are forced to establish a presence in Eastern Europe. Therefore, foreign banks' entry should be positively related with the trade balance or at least with imports from the bank's home country. According to Tschoegl (1997), the volume of exports from host country to the bank's home

country may be negatively correlated with foreign bank presence, as this exports provide certain incentives for domestic banks to go abroad. However, "outward" internationalization of the CEE banks remains restricted for various reasons (Pintjens,1994). Data are inputted from widely available national statistics.

3. The inflow of FDI from the home bank's country (**FDI**);

This test will follow the client hypothesis as already described (Grubel, 1977, Gray and Gray, 1981). Information costs are reduced when the bank which serves the parent company also deals with its subsidiaries abroad. The cumulative volume of FDI from a given country is used, as collected from the relevant foreign investment agencies in Poland, Hungary and the Czech Republic.

The dependent variable will also be negatively related to:

4. The distance between the host and parent countries (**DIS**).

It is generally assumed that the monitoring cost increases with distance. Additionally, some kind of "cultural" distance should be taken into account although it is difficult to quantify. This variable can be also proxied by a binominal variable signifying a common geographical border, or alternatively even by the frequency of direct flights between the two locations (assuming that bankers do not like changing planes).

The population for the regressions consists of the 50 largest European banks, and regress their presence in the three countries: Poland, Hungary and the Czech Republic. Non-European banks were excluded, as only few cases of entry, mainly from largest US banks (most notably Citibank) and banks linked with South Korean industrial groups, have occurred to date. Table 3.6 compares the results of the estimations using the OLS and logit models. The obtained results are similar to those by Ball and Tschoegl (1982) in terms of goodness of fit.

Table 3.6 Entry determinants regression results

	Poland		Hungary		Czech Republic	
	OLS	*Logit*	*OLS*	*Logit*	*OLS*	*Logit*
Const	1.541 (.345)	1.688 (.729)	-2.623 (.407)	-8.109 (.179)	1.399 (.577)	-.716 (.818)
ASE	.0006 (.187)	.0052 (.201)	.0011 (.053)	.0104 (.056)	**.0014** (.030)	.0079 (.036)
IMP	**-.0002** (.020)	**-.0008** (.185)	.0101 (.122)	.1404 (.052)	.0002 (.616)	.0015 (.581)
EXP	**.0001** (.023)	.0006 (.362)	-.0089 (.146)	-.1328 (.058)	-.0002 (.642)	-.0012 (.646)
FDI	**.0004** (.032)	**.0025** (.088)	.0602 (.617)	.5063 (.541)	.00007 (.825)	-.0002 (.909)
ln(DIS)	-.1850 (.402)		.3013 (.456)		-.201 (.551)	
DIS		-.0027 (.476)		-.0006 (.849)		-.0018 (.419)
R^2	.41	.45	.33	.46	.34	.44

Source: Author's calculations. Values appearing in parantheses are the relevant *p* - values (T-test and Wald test for OLS and Logit respectively). R^2 in case of logit model is an analog based on the squared differences between the observed and predicted probabilities. Bold-faced coefficients denote siginificance at the 5% level at least.

The results of the estimation confirm the pattern of entry as described by the survey results (compare Table 3.5). It is especially evident in the case of Poland, where the statistically significant variables (IMP, EXP and FDI in OLS model; IMP and FDI to lesser degree in logit one) are precisely those which are linked to foreign banking presence in the country. However, the variables EXP and IMP, although significant, display the opposite signs to what was expected. This can be attributed to the abovementioned lack of "outward" internationalization of Polish banks. Therefore, high levels of exports to the given country encourages banks to enter Poland, while import growth is viewed negatively, taking into account the foreign debt already accrued.

The Czech Republic, and more specifically Prague, can be more regarded as an international financial centre than as a place with business potential. The only significant variable is the volume of assets, which means that while the largest banks are more likely to be present in Prague, there is only weak link of this presence with trade volume or direct investment. In this context, larger banks enter the Czech market because they tend to have enough global customers engaged in various activities to justify going into almost any foreign location. Additionally, one should take into account the lack of progress in the privatization of the largest Czech banks, and their strong links with industrial firms, both of which reduce the investment opportunities for foreign banks.

In the case of Hungary, estimation results can be interpreted as supporting the "search for new opportunities" description of foreign banks' activities. Most variables seem to be related, although none of them qualifies at the 5% level of significance in a two-tail test. This can be attributed to the fact that all these variables are important when banks enter Hungary looking for new business opportunities. The Hungarian market is perceived as a promising one, both in terms of foreign trade turnover and the number of potential clients. However, these are just additions to the opportunities that exist in this market which was liberalized early on.

3.5. Entry into EE banking sectors - evidence from case studies

As Hoschka (1993) suggested, there are several approaches to collecting empirical evidence on the determinants and effects of cross-border entry in financial services. Considering the relativeiy low level of FDI in EE banking sectors and taking into account the reluctance of banks to provide detailed financial data and information on their strategies (as evidenced by the low survey rate of response), **the case study approach** seems to be most

suitable for uncovering the main characteristics of the typical patterns of banking FDI in the countries in question.

Data for these case studies were mostly collected during field research in these countries. Due to the difficulties in obtaining reliable information, none case of the Czech bank has been presented (see section 1.3.3 on data availability). In some cases, knowledge about the banks in focus was supported by existing literature, which is, unfortunately, very limited.

3.5.1. Large bank take-over: MKB and Bayerische Landesbank

Magyar Kulkereskedelmi Bank (MKB) - Foreign Trade Bank - was established in 1950. Under the centrally planned economy it was the main clearing institution for foreign trade. Its client base was constituted mainly by monopolistic agencies of foreign trade, specialising in different types of products. As the client base was restricted, its branch network was therefore quite small - only seven branches in main towns plus some representative offices abroad.

The bank entered the 1990s in much better shape than the other large state-owned banks. It did not inherit a large volume of bad debts, possessed a modern IT system, had a good portfolio of clients, and in the meantime managed to expand its activities in private banking area significantly. In 1995, MKB was the second largest bank in Hungary in terms of balance sheets, and third in terms of capital. The take-over by Bayerische Landesbank (BLB) was the first large investment of a foreign bank in the Hungarian banking system. It set a blueprint for subsequent transactions and attracted a great deal of public attention.

Prospective partners had the possibility to cooperate earlier - BLB was one of the arrangers of a MKB eurobond issue in 1993. BLB is the fourth largest bank in Germany in terms of the number of accounts and sixth in terms of capital. Half of BLB's shares are owned by the Bavarian Land, and half by the

Bavarian Saving Bank. Due to its ownership structure, but also because of its good reputation, BLB holds a triple AAA rating - the highest possible.

BLB purchased 25% of MKB shares in 1994. Additionally, 16% of shares were bought by the EBRD. According to Kormendi and Schnatterly (1996) the price paid was adjusted afterwards by the next results of the bank. Two additional payments were made based on the bank's gross profits respectively after six months and a year. This method was perceived to be appropriate in order to minimise the "bad debt" risk and to provide proper incentives for bank's staff. After one year, in 1995, an additional 8% of MKB shares was purchased by the German DEG Bank. Soon after the Hungarian State sold the remaining 25% of MKB shares to BLB. After this transaction BLB possesses a controlling stake in the bank and effectively can exercises ownership rights. However, the BLB adopted an arm's length approach in managing of MKB. Normally, BLB does not engage in day-to-day management of the bank. The management board has not been significantly changed, and only a few people were "parachuted" into positions such as IT or the treasury departments to help in their further development. On the other hand **MKB benefited immediately from the owner's reputation and its correspondent network**. This has had the effect of an instant upgrading of the bank's ranking and opened access to cheaper sources of capital. New owners did not significantly change the dividend policy adopted previously by MKB, distributing around 25% of its profits to shareholders. Due to the nature of the new owner, who previously did not have any subsidiaries in Hungary, MKB received a portfolio of clients that has been served on a cross-border basis by BLB. Additionally, BLB's strategy with regard to the Eastern Europe assumes that MKB would be used as a vehicle for entry into other countries in the region. The first such operation was conducted in 1996, when BLB and MKB respectively purchased 55% and 45% of the small Czech Interbank.

Currently 70% of MKB income is derived from traditional credit activities. Costs are kept below 50% in relation to income, while the capital adequacy ratio is slightly below 20%. **The entry of the foreign bank was beneficial for MKB in two main aspects: an increase in the bank's credibility, and transfer of know-how in the most demanding areas.** Arm's length relation between the owners and MKB allowed to them avoid personal conflicts and cooperate smoothly in the search for new opportunities.

Table 3.7 Main financial indicators of MKB (mln USD, unconsolidated)

	1994	*1995*	*1996*
Balance sheet sum	2098	2050	2105
Capital	169.8	169.8	182.9
Net profit	24.4	32.9	44.8
ROE	18.6%	22.6%	27.6%
ROAA	1.3%	1.8%	2.3%
Dividend	n.a.	7.1	5.5
Capital adequacy ratio	20.8%	21.9%	17.3%
Cost/income ratio	62.8%	46.9%	47.1%

Source: Annual Reports, Banking Almanach.

3.5.2. Greenfield investment: Creditanstalt operations in Poland and other EE countries

Creditanstalt Bankverein (CA) in Vienna is the second largest bank in Austria in terms of capital and assets as well as 70th bank in Europe in terms of capital and 66th by assets volume. It operates as the CA Group in Austria and internationally. In Austria, CA possessed 206 branches at the end of 1995 and is the largest single shareholder in three Austrian regional banks. In addition, the CA Group is made up of 17 institutions, but the total number of fully consolidated

individual companies within the CA Group is 140. This number includes those companies held by the aforementioned 17 main CA Group institutions, but excludes several companies in which CA has a minority stake. Apart from EE countries, CA operates globally through its branches and subsidiaries in the main financial centres including London, New York, Hong Kong and Singapore. CA also holds significant investments in the financial sectors of Germany, Italy, Brazil and Argentina. **In this section, the general features of CA operations in Eastern Europe will be described, followed by a more detailed analysis of the Polish CA subsidiary - Bank Creditanstalt S.A.**

CA operations in Eastern Europe started officially on January 23, 1990 with the establishment of Creditanstalt Rt. in Budapest. This bank was funded by CA and Budapest Bank, each holding 75 and 25% respectively. in 1991 CA increased its stake in this bank to 100 percent, simultaneously doubling the initial capital. Warsaw's Bank Creditanstalt S.A. (BC) was established following the approval of its articles of incorporation dated 26 February 1991 on the grounds of Decision Number 5 (5th new bank licensed), as issued by the President of NBP dated 17 January 1991. Later, CA established a number of subsidiaries within the region, at the end of 1995 it was present in Bratislava, Prague and Ljubijana, as well as in Russia through the consortium bank - International Moscow Bank. Investments were also underway in Bulgaria and Romania.

Over just a few years, **CA has become firmly established in the banking systems of EE countries.** This reflected the strategic objective of the bank to become the leading international bank in Eastern Europe. At the end of 1995, CA employed 929 (695 in 1994) persons in its 23 branches (17 in 1994) in Hungary, Slovakia, Slovenia, Poland and the Czech Republic. The total assets of these five affiliates amounted at the end of 1995 to 17.5 bln ATS, having grown

55% from 1994. These assets contribute around 7.5% of total CA Group assets, and around 4.5% of operating income.

Another interesting feature is that **CA Group expansion in Eastern Europe is not restricted solely to commercial bank services**. The swiftly expanding CA Investment Bank - the investment bank arm of CA Group - has by now become active in all countries of the region, including Albania, Croatia and Ukraine. Acting in the areas of corporate advisory, securities brokerage and asset management, CA Investment Bank completed several projects and won an award for the best securities house in region as awarded by *Euromoney*. CA affiliates are also among the most respected custodians in the region. Another area of operations is leasing finance, where CA Group has been operating successfully, especially in the Czech Republic, where it has about 20% share of the leasing market.

In terms of capital Bank Creditanstalt was the third largest CA venture in the region in 1995, and its capital was subsequently almost doubled by mid-1996. In terms of operating results, BC was the second largest CA subsidiary, after Budapest affiliation. According to the 1996 Annual Report BC activities comprise the foliowing:

- opening and running bank accounts for natural and artificial persons in Poland;
- disbursing and drawing down loans, including currency loans;
- issuing, accepting, endorsing and discounting bills of exchange;
- processing electronic funds transfers;
- processing securities on the account of the Bank and its customers and trading these securities;
- receiving deposits in PLN and foreign currencies;

- conducting transactions on the domestic and international money markets;
- conducting financial advisory services.

At the end of 1996, BC conducted these activities using eight branches established in Poland's five primary business centres. Establishment of another three branches is underway. In terms of capital BC ranked in 1996 as the 25th largest bank in Poland, while in terms of assets it was 24th. The bank had 199 full-time employees. Additionally, it held 100 percent of shares in CA Property, a real estate developer, and 50% of CA Leasing Polska. Additionally, the investment arm of CA Group was also represented in Poland as the CAIB brokerage house, owned directly by Vienna.

According to the BC president, Jacek Mościcki, the strategy of the bank can be described as "to be a commercial bank for carefully selected customers"[43]. This is in line with the BC motto: "Bank of Your Success" which is the mission statement of BC. The customer groups that BC is most interested in include both enterprises with foreign participation and large Polish corporations, and also the network of wealthy individuals for which private banking services are offered. For example, in Warsaw the minimum monthly salary required to be accepted as a BC customer at the end of 1996 was equal to approximately 10,000 USD, while the average salary remained at the level of 300 USD. Of the bank's customers, more than 6000 were institutional ones, and almost 400 private customers. Private deposits also contribute heavily to total deposit growth, amounting at the end of 1996 to around 35% of total deposit base. Around 60% of the bank's lending is extended in PLN, while the remainder is denominated in foreign currencies. Of this, the share of bad loans did not surpass 2%.

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43 A. Słojewska, "Uniwersalny bank dla wybranych klientów", "Rzeczpospolita", p.13, 4.03.1998.

From the very beginning **BC specialised in foreign exchange transactions, and foreign trade financing.** There were close to 200,000 foreign transfers in 1994, growing to more than 700,000 in 1996. The number of domestic transfers at the same time amounted to a mere 25,000 in 1994 and 41,000 in 1996. For its main customers the bank offers an on-line electronic banking system which gives access not only to standard operations but also to dealing room and custody services. The computing system is fully integrated with the main CA Vienna system, although with fewer available options for advanced financial instruments accounting and reporting. The links with headquarters are also underlined by preferential treatment offered to CA Vienna or other clients of CA affiliates Apart from specialisation in FX services, another area of the bank's expertise is custody services. According to respected experts, BC is the one of a few banks in Poland which offer these services in accordance with international standards. Additionally, BC serves as a custodian for Korona Mutual Fund - a major venture of CA with the Polish bank BGŻ.

Table 3.8 Main financial indicators of Bank Creditanstalt S.A. (mln USD)

	1994	*1995*	*1996*
Balance sheet sum	114.5	297.4	418.8
Capital (Statutory Funds)	8.4	25.2	39.0
Net profit	3.0	3.6	3.2
ROE	n.a.	21.4%	7.2%
ROA	2.6%	1.75%	0.94%
Capital adequacy ratio	16%	24.9%	19.7%
Cost/income ratio	61.1%	56.2%	65.1%

Source: Annual reports, Gazeta Bankowa, author's calculations

The analysis of financial results for the period 1994-1996 proves that the **business environment of CB is increasingly competitive.** Although

overall volumes of activities have increased quite quickly, as reflected by asset volume growth and an adequate adjustment of the capital base, the profits and consequently profitability ratios has decreased. Moreover, the competition for deposits and qualified staff, as well as the need for advanced technology applications is reflected in increased cost ratios.

These problems and tendencies have been acknowledged by CA management. The adopted strategy, in line with its overall desire to become "No.1 in Central and Eastern Europe", assumed the successful participation in at least one large domestic bank privatisation. The first bank officially targeted in Poland was Polski Bank Inwestycyjny (PBI), headquartered in Warsaw. PBI was established in 1993 to complete the carving off of commercial activities from NBP. It was in relatively good shape, having in its portfolio mostly non-qualified assets matched on the asset side by dollar-denominated state bonds and private foreign currency deposits. It has branches in all but one voivodship towns[44], connected by a modern on-line IT link. However, NBP decided to sell this bank jointly with the comparatively smaller, yet troubled Prosper Bank (PB). NBP offered for sale 100 percent of PBI shares along with almost 100 percent of PB shares. This was one of the deciding factors for CA participation in this bid, as simultaneous privatisation offers of other large banks restricted strategic investor participation to a maximum of 50-60% of shares, offering the remaining shares through the stock exchange and to employees.

In its initial bid, CA offered around 440 mln PLN for both banks, including 200 mln PLN for covering PB losses. Additionally, CA was willing to undertake investment in PBI in range of 85 mln PLN during the first three years and 50 mln in the next two. After the purchase of PBI Bank Creditanstalt Poland was supposed to terminate its territorial expansion, while PBI expansion should continue apace.

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[44] There were 49 voivodships in Poland in 1993.

However, the NBP board decided, after consultation with the government, to sell PBI and PB to the domestically controlled Kredyt Bank (KB). Although the KB offer was more complex and included a number of conditions that did not exist in the BC offer, it was clearly evident from the purely financial point of view that this offer was less competitive than the BC offer. Apart from the fact that KB paid only 205 mln PLN for both banks, KB will, for example, cover PB's losses in several tranches extended for a period of up to seven years. The restructuring of PB will be supported by significant loan granted by state-run Bank Guarantee Fund. In addition, PBI has been formally incorporated into the KB structure, while CA plans assumed leaving the independent structure intact. The main reason for choosing the less profitable offer by NBP was the perceived need to maintain a balance between foreign and domestic investors in the Polish banking sector. The tender coincided with the final development of the "consolidation programme", as described in section 4.3.2. and the general strengthening of protectionist tendencies in the leading political circles.

Two significant issues will affect future CA presence in Poland. Primarily, in Austria, CA was taken over by Bank of Austria, which also had a significant presence in EE countries. Some operations were merged and BC consequently changed its name to Bank Austria Creditanstalt. Secondly, in 1997 CA acquired around 18% of shares in one of the privatised large regional banks - Powszechny Bank Kredytowy (PBK) in Warsaw. Consequently increasing its share through stock exchange and other purchases, CA appears well positioned to take over control of PBK in the future.

3.5.3. Interregional entry: GBT purchase by Gazprom Bank

General Banking and Trust Co. Ltd. (GBT) is the one of the oldest and most prestigious Hungarian banks, established in 1922. Its core activities were focused on servicing small joint ventures as well as offering foreign

currency deposits to individuals and some special business lines such as services relater to VAT refunds. GBT has nine modern branches situated in downtown Budapest and a few foreign representative offices. The bank was always in the front of financial innovation, for example as the first bank in Hungary to introduce an on-line, real time clearing system.

From 1990 to June 1996 half of GBT's shares were controlled by the state, while the remaining 50% was in the possession of the Central European Development Corporation (CEDC), an institution controlled by rich Hungarian immigrants from US and Canada. CEDC was not able to increase the bank's capital significantly over the period of six years. Due to a number of factors, mostly erroneous credit decisions, GBT faced serious financial difficulties. In 1995 its return on assets (ROA) equalled minus 3.6%, with a capital adequacy ratio below 8%.

In July 1996, state and foreign shareholders decided to sell their stakes to Gazprom Bank, which is a wholly-owned subsidiary of Gazprom. CEDC accounted for a loss on this transaction, as the share price was said to be close to the purchase price in 1990, and during its ownership period GBT did not pay a dividend. The issue of selling the bank to a Russian owners appeared to be a quite controversial and political one, because of the widespread preconception about Russian banks' links with the underground economy and accusations of money laundering. However, as was underlined by authorities, Gazprom Bank is a subsidiary of the largest company in Russia (in fact one of the largest in the world) and as such should be excluded from the kind of suspicions usually linked with some of the other Russian banks. Additionally, Gazprom is due to embark on large investments in Hungary, and therefore ownership of its own bank was a precondition for these operations. GBT's financial position was also taken into consideration, as without an increase in capital the bank could simply go bankrupt. The top management has been

changed and replaced mostly by Russians, although most of the senior operational managerial positions were left intact.

Apart from a ten-fold increase of tier i capital in two infusions (the second increase in 1997 by Gazprom-associated firms and subsequent increases up to around 100 mln USD expected), **Gazprom channelled all of its Hungarian business to GBT** and appointed GBT to operate as a clearing house for all of the income from its gas sales to Hungary and neighboring countries. Payment on gas supplies to Hungary alone amounted to USD 650 million in 1996[45]. At the end of 1996, the capital-liquidity ratio increased almost four times, and the bank started to be marginally profitable with most profits coming from fees and commissions and trading and forint activities almost doubled. On the interest side GBT was has had positive income only from the Central Bank (mostly on foreign currency reserves), while in case of other entities interest expenses were higher than income. Additionally, during 1996 the bank has sold with losses significant portion (19.2%) of only partially provisioned non-performing loans. Also GBT's brokerage firm was sold. This means that **new owners are interested in extensive portfolio cleaning and restructuring**. Just a few months after Gazprom's entry, GBT took part in co-arranging a large syndicated loan for the Hungarian fuel sector. More such deals are expected in the future. Due to the nature of its shareholder, **GBT aims to specialise in energy and fuel sector financing**, and expanding its dealing room and credit department services. However, GBT also wants to remain active in all of its previous, traditional areas of activities. For example, new products such as Visa cards and personal current accounts were introduced at GBT branches.

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[45] Source: GBT 1996 Annual Report.

Table 3.9 Main financial indicators of GBT (mln USD)

	1994	*1995*	*1996*
Balance sheet sum	278.2	263.7	433.1
Capital	19.9	6.5	31.5
Net profit	1.9	-8.6	1.5
ROE	10.1%	-88.2%	4.6%
ROAA	0.8%	-3.6%	0.3%
Capital adequacy ratio	15.4%	7.4%	25.7%
Cost/income ratio	71.7%	95.7%	93.5%

Source: Annual reports, Bank Almanach, BREE

Although GBT has not benefited from the know-how of its new owners (rather there was a transfer of knowledge in the opposite direction), the increase of capital and establishment of niche specialisation allows a forecast of a stable future for GBT. This would not have been as certain under previous owners. Additionally, spin-off effects from Gazprom's investment in Hungary might be important for the entire economy. The sale of GBT is perceived to create good grounds for these investments.

3.5.4. Non-banking investor: PPA Bank and Polish-American Enterprise Fund

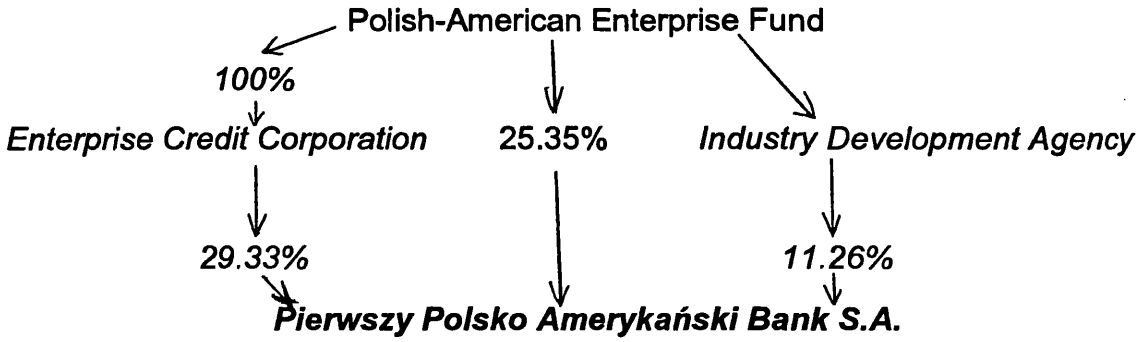
Krakowskie Towarzystwo Bankowe (Krakow Banking Society) was established and received a banking licence at the end of 1990. In February 1991, the name of the bank was changed to Pierwszy Polsko-Amerykański Bank w Krakowie (PPA Bank - First Polish-American Bank in Kraków) as newly issued shares were bought by Polish-American Enterprise Fund (PAEF). This fund was established by the US government and is registered in the US a non-profit aid

organisation. Its activities concentrate in the area of private sector development in Poland. Up to mid-1995, the Fund invested almost 230 mln USD in Poland.

After subsequent share issues, the ownership structure evolved, as described by graph 3.1. Almost 30% of shares were held by the Enterprise Credit Corporation (ECC) which is a wholly-owned venture of PAEF. In 1995, PPA Bank was listed on the Warsaw Stock Exchange with a free float amounting to around 30% of shares. Another 11% of shares were held by Agencja Rozwoju Przemysłu (Industry Development Agency) which is a state agency established to promote industrial development and financed mostly from the state budget.

In 1996, PPA Bank had 5 branches and 13 sub-branches, most of them concentrated in the southwest of Poland. The bank belongs to the midsize cluster of Polish banks. At the end of 1996 it held the 38th position of 82 Polish banks classified according to equity capital value in the "Gazeta Bankowa" rankings.

Graph 3.1 Ownership structure of PPA Bank as of 1.01.1996



Source: PPA Bank Report

PPA Bank's activities were significantly affected by the very nature of their foreign owners. **The bank started to focus on Small and Medium Enterprises (SME) financing**, as this is a statutory task of PAEF. Particularly, it took over a function of leading banking institution involved in PAEF programme

of SME loans. Before PAEF acquisition of PPA Bank, this programme was served by a number of reglonai banks. In total. a portfolio equal to 38 mln USD in loans and cash was allocated to the bank and supplemented by the bank's own resources. Additionally, all PAEF and ECC accounts were moved to PPA after it received a full foreign exchange licence. Due to its increasing reputation in the area of SME financing and project appraisal, in 1996 PPA Bank signed a deal with the State Fund for the Disabled under which it is responsible for granting subsidised credits towards projects involving the employment of the disabled.

Table 3.10 Main financial indicators of PPA Bank (mln PLN)

	1994	*1995*	*1996*
Balance sheet sum	57.1	106.8	145.8
Capital (Statutory Funds)	8.9	9.8	15.7
Net profit	1.5	1.4	3.2
ROE	17%	14.5%	20.1%
ROA	2.6%	1.3%	2.2%
Capital adequacy ratio	45.6%	20.3%	21.6%
Cost/income ratio	45.7%	63.7%	56.6%

Source: PPA Bank Annual Report

Apart from bringing a capital and investment portfolio the new owners also brought significant knowledge in areas of cost control, monitoring procedures etc. As a non-banking company, PAEF did not bring specific knowledge in the areas of foreign exchange market or IT procedures. However, in dealing with the overall management structure, PAEF recognised the needs to complement the bank's structure in these areas and in order to improve them hired properly trained staff.

Due to significant capital infusions, over two years (1994-96) **PPA Bank was able to almost quadruple its balance sheet sum**, while keeping the share of classified loans near to 3 percent level. The highest expansion took place in the area of foreign currency denominated credits, which in mid-1996 constituted 57.4% of the bank's portfolio. Simultaneously, new directions of activities, such as leasing and foreign currency financing, it allowed to increase number of customers served and preserve competitiveness. It has also established the President Club, which is a starting point for expansion into the area of private banking activities, but which also provides a useful forum for the exchange of ideas and attracting new customers. In the future, PPA Bank plans to develop its IT system and introduce new products such as factoring and cash management. However, the main focus of the bank's business will still remain in the SME sector.

In the case of PPA Bank foreign shareholders contributed mostly towards directing the bank into a clear customer base orientation and specialisation. The bank complements the main tasks of US governmental funds established to help private firm development. By doing this, it achieved comparatively good financial results and found a profitable niche in an increasingly competitive environment. However, it was only in 1996 that the bank was able to achive a ROE higher than inflation.

Finally, in December 1997 a new share issue, addressed to the largest Belgium bank, Generale Bank, was announced. After this operation, Generale Bank will hold 9.7% of PPA Bank shares and have one representative on the Supervisory Board. A European Desk will be created in the structure of PPA Bank, focusing on Generale Bank clients operating in Poland. Additionally, some transfer of know-how is expected, as Generale Bank is a leading specialist in financing SMEs in Belgium. Due to the change of shareholder structure, PPA Bank will also increase its presence in the areas of private banking and foreign

exchange operations. It should be expected that in a long-term perspective Generale Bank will be interested in obtaining a controling stake of the bank. PAEF, being a special type of venture investor, will sooner or later consider a dis-investment procedure, with Generale Bank the naturall first choice for a stake purchase offer. This process can be accelerated by political decisions linked with the slow withdrawal of United States aid from the more developed EE countries.

3.5.5. Retail bank purchase: ING investment in Bank Śląski

Bank Śląski (BS) privatisation proved to be a milestone for subsequent bank privatisations in Poland. Abarbanell and Bonin (1996) describe in detail the transactional structure of this privatisation which, coinciding with the stock exchange boom led to the so-called "Śląski Affair" resulting in a number of high-profile dismissals, including the dismissal of all but one member of the BS managing board. However, due to the topic of this dissertation, the focus will be on the effects of entry of strategic foreign investors into BS, leaving aside questions linked to privatisation procedures and overall bank's performance.

Bank Śląski was one of the nine regional banks created on the base of former NBP branches structure. It heredited a relatively dense network of branches in the industrialised Silesia region of the southwestern part of Poland. Apart from serving a number of significant industrial clients, prior to privatisation BS developed a diversified client basis and achieved very good financial results, being always included in the Top 10 bank ranking by "Gazeta Bankowa". The Dutch ING Bank entry into BS occurred in two phases. First, in 1993, during the privatisation flotation ING purchased 25.9% of BS shares. In 1996 it bought another 28% of BS shares which had remained in state hands. In total both purchases amounted to the equivalent of around 270 mln USD. In the meantime BS performed steadily, (as well as its shares on WSE) benefiting in certain areas from ING expertise.

Table 3.11 Main financial indicators of Bank Śląski (mln USD)

	1994	*1995*	*1996*
Balance sheet sum	2166	2748	2984
Capital (Statutory Funds)	121.1	175.5	208.6
Net profit	86.1	104.4	103.6
ROE	n.a.	70.7%	42.6%
ROA	3.97%	4.27%	3.88%
Capital adequacy ratio	14.8%	14.2%	13.7%
Cost/income ratio	30.3%	33.6%	39.8%

Source: Gazeta Bankowa, author's calculations

However, more information about the ING approach to BS appeared before the second share purchase transaction was completed. Particularly, the scope of ING know-how transfer was discussed. As Abarbanell and Bonin (1996) describe, an organisational and operational impact of ING was particularly visible in four key areas:

- lending, marketing and brokerage services;
- adoption of more aggressive business strategy;
- changes in loan portfolio;
- information system.

However, **achievements in all these areas were not exceptional**. One could imagine similar results (in fact in line with other similar banks' development) could possibly be obtained within the framework of fee-based cooperation with outside banking consultants, not necessarily linked with ownership transfer. Moreover, due to the **lack of a clear strategy** adopted by ING with respect to BS, results in some of these areas underperformed those of competitors. For example, a number of similar banks had already introduced

on-line clearing between their branches, while BS had not achieved this. Obviously, some of these bottlenecks were caused by difficulties linked with co-ownership of BS by the state and consequently risks involved with possible engagement. Nevertheless, a significant part of these problems can be attributed to the iNG strategy adopted in Poland. This strategy assumed **weak links between ING affiliates in Poland** and allowed for competition between them. Consequently BS found itself in position where the ING branch in Warsaw made several attempts to take over the best BS clients. One BS officiai stated that because of these issues, BS maintains better links with other commerciai banks, whiie relations with ING Warsaw have always been characterised by a great level of suspicion. On the other hand, attempts to introduce Nationale Nederlander (the insurance arm of ING) products to BS branches partially failed as these products were not properly suited for BS purposes, and most probably profits from their saie would have been unevenly distributed. **Consequently, it must be concluded that each case of foreign take-over should be judged not only on the basis of the price offered and the foreign bank's reputation, but also and most importantly on the merits of the strategic plan that will be adopted afterwards.** It is especialiy important in a case when the investing bank is already present in the country and the purchase of a larger bank constitutes another step in its activities. In the case of BS, although the general assessment of foreign entry can be positive, several structural bottlenecks occurred, which could be prevented.

3.6. Conclusions

In this chapter an overview of the multinational banking theories was presented. A brief review of main issues linked with the phenomenon of FDI in banking focused on factors contributing to rationale of FDI in banking,

investment patterns, and the main locational factors. Additionally, institutional forms of entry were discussed.

Empirical evidence from the survey confirms that the main reason for investing in the EE banking sector is the **"follow the client" motivation rather than a search for new business opportunities**. Institutional arrangements from investment differ and depend to a large extent on regulatory incentives. **Foreign banks tend to specialise in corporate and trade finance services and neglect the retail market**. EE operations are very promising in terms of profit growth, and as a result a high rate of return from these investment is expected. With regard to differences between countries, **Hungary** is perceived to be the country with a greater number of business opportunities, while in case of **Poland** and the **Czech Republic** efforts are focused mostly on supporting already existing client base, although only Poland is seen to be underbranched country. These results are similar to Lankes and Stern (1997) findings on general FDI pattern in the EE countries, where the level of perceived country risk is negatively correletad with the progress of overall economic reforms.

The most important pattern of investments were traced in case studies that described samples of most typical patterns of foreign entry in the EE region. **The expansion of foreign banks in the EE countries remains explainable within the framework of multinational banks theories**. The bulk of investment comes from countries which have relative comparative advantages in financial services over the transition countries and investment is motivated by the expansion of investors' clients into these markets. Relatively less popular is the more risky, capturing strategy which assumes direct competition with local banks. This conclusion will be important in the course of the cost-benefit analysis in Chapter 5 as well as for some regulatory issues presented in the next chapter.

Chapter 4. Protectionism and impediments to investment in banking services

4.1. Introduction

The banking industry is very often treated as a special industry. Due to a number of reasons and especially because of a perceived systemic risk, regulatory activity in banking and in finances in general, is deeper and more advanced than in most other economic activities. In fact, **banking is regulated to a greater or lesser extent in almost all countries** (Tschoegl, 1985). One of the most challenging tasks for banking system regulation is the establishment of a **proper balance between efficiency and stability goals** (Vittas, 1991). Moreover, as described in Chapter 3, banking is heavily exposed to internationalisation; trade in financial services has become one of the most vital issues in discussions related to trade liberalisation. Therefore, the question of trade policy in financial services arises. Such a policy should be parallel and complement "normal" trade policy and should be conducted with a clear strategic vision in the background as well as a clear calculation of the arising costs and benefits. Although the set of tools that might be used is less developed than in the case of typical trade, regulators still posses a number of powerful devices that allow them to influence the conduct of international trade in financial services. One of the most significant factors that increases the probability of application of these devices is the size and scope of state ownership in banking sector (Tschoegl, 1989), as well as desire to frame financial sector into the development policy.

Foreign investors, in this case banks interested in establishing its presence in a given host country, encounter a number of regulatory as well as "infrastructure" obstacles in the process of investment. Apart from trade policy

reasons, these obstacles are caused, for example, by technical underdevelopment, lack of required personnel skills or a low level of general economic education of the population which leads to low demand for certain, often more sophisticated, financial services. Some distortions might be also caused by different treatment of the investment in the financial sector from the investment directed towards, for example, an industrial sector.

After discussing the theoretical background, **this chapter will look into the main problems encountered by the foreign investors** on their way to establishing a presence in Eastern Europe. Particularly, it will address the **question of actual protectionism in banking services.** Survey-based evidence of the main obstacles and threats to future activities of foreign banks in Eastern Europe will be presented. It is perceived that some protectionist measures appeared in course of reforms in the region. Restrictive tools applied in Poland, Hungary and the Czech Republic will be identified and described. The so-called "consolidation" plan in Polish banking, designed to strengthen domestic banks against foreign competition, will be described and analysed in more detail. Using a translog cost function the potential cost reductions due to the mergers of state-owned banks will be evaluated. The appraisal of the costs and benefits of foreign entry is left for the next chapter.

4.2. Theoretical background

4.2.1. Regulations

Banking regulations could be understood as a set of rules govering banks' activities. The enforcement of these rules, including the establishment of regulatory bodies, can be termed supervision. Particular supervision functions might be spread across different organisational entities, but usually will include: bank licensing, liquidity monitoring and insolvency proceedings.

Another important issue for conducting supervision is the institutional set-up of this activity. There is no generally accepted answer to the question whether the supervisory function should be separated from the monetary one, i.e. conduct of monetary policy (Goodhart, 1995). In circumstances of "bad debts", as in the EE countries, this appears to be one of the key questions for the proper administration of supervisory functions. All the usual arguments[46] for the combination of monetary and supervisory function under one roof are applicable in Eastern Europe. However, some of the arguments against separation are often even more obvious in this region than in other countries. For example, one of the first tasks during reforms was to build (or reconstruct) a proper payment system. Central banks were forced to play not only a regulatory but also an operational role in organising and operating this system. In the early stages of transformation, only central banks were financially strong enough and simultaneously possesed the appropriate know-how to establish and run proper settlement systems. Taking into account the organisational and financial scope of this activity, commercial banks involvement was very limited, although it has subsequently increased. Also, the argument of exercising of the Lender of Last Resort function (Goodhart, 1995) is valid in the clearly unstable economic environment of Eastern Europe. Additionally, **in the circumstances of a rapidly developing financial sector, the central bank cannot be isolated from learning about current changes in this sector**. By performing the supervisory function, the central bank can acquire knowledge about the evolution of the country's banking system as well as the ability to act instantaneously against possible frauds and threats to the financial system. Actually, in the circumstances of institutional underdevelopment of EE economies, there are no other institutions, apart from Ministry of Finance, which can undertake these supervisory functions. However, the Ministries of Finance in

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[46] Such as responsibility for a payment system and prevention of systemic crisis - see Goodhart(1995) pp.345-358.

granted to BNP-Dresdner as a reward for Dresdner Bank's debt rescheduling efforts (see Chapter 1), afterwards all banks, foreign banks, or financial entities applying for a license, or even those taking over other Polish banks, were forced to "pay" for this privilege. This payment took different forms ranging from the purchase of low-interest, bearing bonds of a troubled bank to the take-over of a bank in liquidation and included paying - off its debtors. Some evidence of these a practices is presented in Table 4.4. The value and form of the required investment varied, but it usually ranged between the equivalent sum of 5-7 mln DEM in PLN. It must be noted that in most cases, the real cost of the fee was lower than the sum invested, as the money involved in this form of credit or bond purchase will be returned at a later date, although at a low interest rate and with exchange losses due to the depreciation of the PLN.

An implicit fee has to be paid not only in the case of granting a license for the establishment of a greenfield subsidiary, but also for significant entry into an existing bank which is in good shape. A technically implicit fee was paid in each of three cases:

1. The take over of a bank with license in order to continue its activity;
2. Issuing of a new license;
3. Increasing the volume of shares up to a controlling stake (usually more than 50%).

As all of these decisions remain under NBP control, each case of entry was preceded by negotiations that eventually led to the final applied solution. ABN AMRO and GE Capital provide two examples of take over and consequently bailout and restructurisation of troubled banks. Other cases involved either the take over of relatively smoothly functioning banks (Petrobank,

Bank Rolno-Przemysłowy) or the take over of a troubled bank due to be liquidated (Megabank, Bank Morski) and the simultaneous set-up of a new bank under the issued license. It should be noted that the NBP licensing policy was quite flexible, but always involved foreign entrants into the restructuring process of the Polish banking sector. Moreover, foreign banks' funds were used in two cases even to restructure banks that were previously established with foreign participation (Bank Św. Stanisława and Solidarność Chase Bank), although in both cases previous foreign investor was not a typical representative of a banking sector. From the point of view of international investors, the licensing fee was set at a relatively acceptable level and did not significantly deter potential entrants. Although the amounts of money involved did not solve all of the major problems in the Polish banking sector, in a few cases this money allowed the use of public (NBP) or depositors (Deposit Guarantee Fund) funds to be avoided.

Table 4.4 Use of implicit licensing fee up to the end of 1996

Foreign bank	*Date*	*Polish bank*	*Technique used*	*Valuation of involvement*
ABN AMRO	Dec 1994	Interbank (name change: ABN AMRO)	Take over of Interbank with 14 mln PLN losses in 1994 and funds of 16.7 mln	Share purchase for USD 10 mln (140% of face value)
Westdeutsche Landesbank (new license)	Feb 1995	Bank Morski (liquidated)	Share purchase of bank with 19 mln PLN losses and 14 mln PLN funds and payment for restructurisation services	75% of shares purchased for 5 mln DEM (800% face value) and fee paid to the Polish Development Bank
Deutsche Bank (new license)	Jul 1995	Prosper Bank (later sold jointly with PBI by NBP)	Bond purchase	Approx. 6 mln DEM bonds with 1% interest. Bonds valid up to year 2003
GE Capital	1995	Solidarność Chase Bank (name change: GE Capital)	Share purchase of bank with 3 mln PLN losses	New shares issue approx. 10 mln DEM.
Hypo-Bank (new license)	Aug 1995	Wielkopolski Bank Rolniczy	Share purchase	Approx. 7 mln DEM paid for 10% share in capital and 80% share in funds
Vereinsbank (new license)	Dec 1995	Megabank (liquidated)	Share purchase and pay back depositors	Approx.13 mln PLN paid (shares& deposits)
Rabobank	May 1996	Bank Rolno - Przemysłowy (name change: Rabobank)	Share purchase and technical assistance to cooperative banks	Approx. 12.5 mln DEM for shares with 115% face value. Data on technical assistance n.a.
Ford Credit Europe (new license)	Sep 1996	Bydgoski Bank Budownictwa (liquidated)	Loan for WBK taking over some lines of BBB business	Long term, low interest loan, value n.a.
LG Group	1996	Petrobank (name change: LGPetrobank) and BWR	Purchase of 50% +1 shares in Petrobank, loan for BWR	Shares purchased for price on par with the WSE, 7-years loan for BWR of approx. 5.5 mln DEM with low interest
Berliner Bank (new license)	Dec 1996	Bank Św. Stanisława	Share purchase	Shares purchased for aprox. 7 mln DEM at 12 times face value

Source: "Gazeta Bankowa" 1.12.1996, author's valuation of involvement.

Other license restrictions were linked with opening of branch. In fact, only the Czech Republic allowed for relatively liberal entry of foreign bank branches. In Hungary, until the end of 1996 no foreign branches were allowed, while in Poland three branches existed[58], all licensed prior to 1993. In both countries, an absence of branches was the effect of clear national bank's policy. Such a policy implicitly disallowed branch licensing, although relevant rules existed in the Banking Laws. In both cases, withdrawal from branch licensing was caused by the perceived need for more complicated supervisory arrangement to deal with branches which did not have their enmarked reserve capital, and in fact constituted an extension of a bank located abroad. In the Polish case, this perception was reinforced by the conduct of existing branches. Although it was never officially stated, banking supervision encountered several problems in dealing with foreign branches. The branches activity was also to a certain degree hidden from public view, as branches did not publish their reports (or only published them with a long delay), providing instead global data on their "mother" bank.

After being admitted to the OECD, Poland and Hungary undertook an obligation to allow branch entry after the end of 1998. However, according to both NBP and NHB officials this will take the form of licensed admission rather than allowing free entry. In other words, branches will be allowed but basically will not have any special advantages, at least during the licensing process, over a normal subsidiary in the form of a fully licensed bank. According to Mervat (1996), the Czech Republic announced beforehand that it would not ask the OECD or EU for any adjustment period in this respect. Further developments might be expected after the admission of these countries to the EU, when the Second Banking Directive rules should be adopted. These rules include, among other items, uniform bank licensing and the ability to establish branches across

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58 Including The American Express branch which in fact did not perform typical banking activities.

the entire territory of the EU, adoption of the home country principle in the supervisory activities and mutual recognition of bank licenses.

Selective procurement

The scope of selective procurement practices in banking is difficult to evaluate. This is due to the confidential nature of banks' operations. Additionally, in the EE countries most of these practices were based on some implicit methods. The most widespread example was an "implicit" rule to keep the main deposit accounts of state-owned enterprises and administrative organisations only in state-owned, or at least domestically-owned banks. In line with this, 9 out of the 10 large Polish corporates surveyed by "Gazeta Bankowa"[59] in mid 1996 held their main bank accounts with state-owned banks. Obviously, foreign banks were involved, as some services were simply not offered by the domestic ones. Some preferences could be also traced in major bids for the delivery of specific financial services. However, where very specialised services (such as Eurobond issuing) were often required, domestic banks were nearly always excluded because of the lack of required experience and reputation within the banks.

Generally, this instrument of support for domestic banks weakened over time. The main reasons were the increasing independence of enterprises and more importantly, the progress of privatisation both among enterprises and banks. New corporate owners could independently undertake decisions and generally, as stated by a high official of one state-owned bank, the each completed privatisation of the bank's clients has the immediate effect of shifting funds to another, usually foreign, bank.

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59 "Gazeta Bankowa" 7.04.1996, p.1-3.

Tax instruments

In the early stages of transformation, some tax concessions were granted to foreign investors. Concessions in the form of tax relief, a quicker depreciation rate allowance, etc., were motivated by the perception of high investment risk and therefore the necessity of providing some incentives for foreign entrants. Another factor was the assumed competitive impact of these entries and the associated know-how transfer.

This situation has changed after a short, 2-3 year period. Although in most instances a "common ground" was established for domestic and foreign entities in the general adoption of national treatment rules, some discriminating instruments were selectively in use. The scope and the nature of these were relatively restricted, but in some areas were visible and distinct. Particularly in the **Polish** banking sector, after a short period it turned out, at least according to the authorities that foreign banks displayed high profits in an inflationary environment without a necessity increase of their capital base. This was partially caused by the fact that these banks were allowed to keep their initial capital in foreign currencies[60]. Thus, the effect of PLZ devaluation was an annual increase of the specially established revaluation reserve funds of these banks. As these reserves were included into equity categories used for liquidity and exposure limits calculations, the subsequent adjustment of the capital base was not required. This solution was guaranteed by the NBP and Ministry of Finance in October 1990, in a document presented to prospective foreign investors which was also published in English[61]. However, in May 1993 the NBP changed these rules, disallowing capital contribution in foreign currency in the future. Following this, in December 1993 the NBP instructed foreign banks that for the purpose of exposure limits and other financial ratios calculations, it would use the value of capital contributed in foreign currencies converted using the historical exchange

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60 The author was unable to obtain reliable information on situation in other countries.

61 "Gazeta Bankowa" 44/1990.

rate from the date of capital registration. This resulted in reported significant "artificial" undercapitalisation of some foreign banks which eventually forced them to actually convert currency-denominated capital into PLZ/PLN. According to Ministry of Finance rules this conversion should have been taxed (at the 40 percent rate) as it involved positive exchange rate gains accounted to the profit and loss account. In fact such an interpretation was equal to the confiscation of a significant part of the foreign banks' capital.

As could be expected the banks involved opposed new regulations. Apart from raising questions about the credibility of earlier declarations, some banks applied for individual tax waivers for these transactions. Although data on the scope of this operation remains confidential, it seems that most of banks paid a tax contribution in the first instance as required in order to avoid possible penalty interest. Later, they tended to open administrative and legal proceedings to attain a refund of paid tax. However, the situation changed after a new method for a whole operation was developed by one bank. Instead of directly converting foreign currency into PLZ, the bank doubled its capital by issuing shares denominated in złoty for a total value equal to the value of foreign currency denominated shares. This value was set according to the current exchange rate. Then, the part contributed in foreign currency was withdrawn by discarding foreign denominated shares. The value of these shares was refunded to the owners, who simultaneously used it to pay the outstanding value of the new shares in PLN. Due to the use of this "methodology", exchange rate gains did not occur and could not be taxed. Moreover, after facing some instances of the use of this method, the Ministry of Finance decided to grant a tax waiver to other foreign banks which conducted their conversion operations via the conventional method.

It must be admitted that the main motive for the initial change of the regulation was a desire to equalise conditions regarding capital for both foreign

and domestic banks. Prior to this change, foreign banks were clearly handicapped vis-a-vis domestic ones, at least under pegging devaluation conditions. However, instead of simply setting a new "equality" status quo, a clear attempt was made by the authorities to use this occasion to adjust the ex post tax gains of foreign banks which arose due to their previous preferential treatment. Although it failed in this particular instance, this clearly indicated a desire to restrict foreign banks through the use of tax instruments. Thus, tax treatment was perceived to be a substitute of entry protection in case of having a number of entrants already licensed and operating.

Privatisation policies

The participation of foreign banks in the privatisation of large domestic banks has always caused controversy (Aliber, 1984). In the EE countries, these controversies resulted in, at the least an unpleasant atmosphere surrounding each privatisation by sale to foreign investors (Slay, 1996). Moreover, a number of privatisations were later followed by criminal prosecution (see the Bank Slaski case described in section 3.4.5) and some were even postponed or cancelled due to the foreign origin of the successful bidder[62]. On the other hand, as the Creditanstalt case (section 3.4.2) proves that at least in Poland, domestic investors were clearly preferred, even when better financial conditions were offered by foreigners. As a Polish Treasury deputy minister stated with respect to hypothetical price competition among banks interested in the privatisation of a given bank: "What is more important during privatisation is that the strategic partner is chosen according to the bank's needs"[63].

A number of factors could contribute to the negative attitude towards foreign investors. The primary managing boards of banks are interested

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62 When it turned out that Samsung was a sucesfull bidder for PBK shares, a bid was canceled. Domestic investor preferences occured also in a bid for PBI Bank (see section 3.4.2).

63 An interview with A.Kornasiewicz, "Gazeta Wyborcza" 23.04.1998 p. 24.

in achieving a dispersed shareholders base, as this allows them to run the bank independently. Foreign investors are desired as a complementary partner without having a significant influence over management decisions. This was clearly illustrated in the privatisation of the largest (in terms of equity) Polish bank, Bank Handlowy (BH). Three financial investors, JP Morgan, Swedebank and Zurich Insurance, were offered 12%, 6% and 5% of shares respectively. Apart from certain reserve shares the remaining shares were sold in even smaller portions to other entities and individuals. Thus, the management was able to maintain its controlling position, while fulfilling the government's strategic objectives of bank privatisation. Obviously, the final set-up was in fact the result of the strong position of management at the beginning of privatisation and the good shape of the bank itself. Actually, in Poland only those state banks privatised relatively early in the process have more than 50% ownership held by the foreign banks that undertook full responsibility for running theses banks. This is in line with Slay's (1996) remark that in EE countries only those banks can be viewed as privatised in which the state treasury does not hold the largest equity stake.

In other privatisations, foreign participation was restricted to such a degree that it could not influence strategic decisions. The concept of privatisation with a "strategic investor" was therefore abandoned quite early, or rather replaced by the concept of "domestic strategic investor". On the other hand, in **Hungary**, after negative experiences with domestic investors, the privatisation of the main banks took generally the form of sale to strategic foreign investors. However, the sale was conducted when the position of managers weakened, as banks encountered once again bad debt problems after wasting significant amounts of public funds on unsuccessful portfolio cleaning. In the case of the **Czech Republic**, managers' positions remained strong and was additionally enforced by close links with industry and politics. Only recently, after 1996 as

banks' positions deteriorated, have strategic foreign investors become more acceptable. However, their entry might be hampered by unrealistic price expectations.

Managers' resistance would not matter if only the owners (i.e. the state) was determined to allow foreign investors on board. However, due to the political instability the privatisation process was never easy, especially with regards to banks and in this case with regards to foreign investors. The combination of these two, foreign investors in the banking sector, doubled the controversies and increasingly forced governments to undertake some steps to balance the political exposure caused by the admission of foreign investors with some moves designed to strengthen and immunise domestic players vis-a-vis foreign competition. In the Polish case, this took the form of the "Bank Consolidation Program".

Forced consolidation[64]

In order to prepare Polish banks for the liberalisation of the banking sector in October 1995, the government approved a framework for the consolidation program to create two large banking groups based around Bank Polska Kasa Opieki (PeKaO SA) and Bank Handlowy (BH). This program involves pooling state-owned banks in order to increase their market share and efficiency. It has met with much criticism and has undergone as many as 14 revisions. After drafting the final plan on the composition of the groups and technical methods of consolidation, by the end of 1996 **two bank groups had been created under the Consolidation Act.** First, PeKaO SA, which possesses a countrywide network of 135 branches, was merged with three regional banks: Powszechny Bank Gospodarczy (PBG) from Łódź, Bank Depozytowo - Kredytowy (BDK) from Lublin, and Pomorski Bank Kredytowy

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64 This section is mostly drawn from Konopielko (1997a).

(PBKS) from Szczecin. Each of these three banks has around 50 branches concentrated in their respective regions. Second, a much smaller group was created in October 1996 by granting almost 33% of the shares of the investment oriented Polski Bank Rozwoju (PBR) in Warsaw to Powszechny Bank Kredytowy (PBK), also a Warsaw based bank with 62 branches. The forthcoming privatization of PBK is an opportunity to allow it to form a larger group including Bank Przemysłowo - Handlowy (BPH), Kredyt Bank (KB) and Warta, the second largest non-life insurer in the country.

Simultaneously, **two private-led banking groups emerged**, the first led by Bank Inicjatyw Gospodarczych (BIG) financial group with its purchase of a core stake in the privatization of Bank Gdański (BG), and the second led by Kredyt Bank (KB), which tendered successfully for 100 percent shares of Polski Bank Inwestycyjny (PBI) that were sold by the National Bank of Poland. This action restricted KB's financial ability to take part in the PBK group mentioned above. PBK has been privatised with Warta and Credietanstalt participation, which allowed Austrian bank to be "compensated" for its previous, unsuccessful bid for PBI (see section 2.4.2) Finally, in May 1998 PBK sold PBR shares to BRE, answering for BRE public offer.

Bonin and Leven (1996) characterize the consolidation process in Polish banking. They analyse the political argument that Polish banks are too small to meet foreign competition, although it is hard to find any justification in their paper why size should matter. Also their economic arguments for consolidation lack empirical verification. Moreover, they are generally against centralised and state "orchestrated" bank consolidation, proposing instead three different "decentralised" consolidated banking groups. Their proposal is mostly based on location analysis of the given banks' branches. Basically, it assumes that consolidated banks should cover evenly the territory of Poland. Thus their proposal is lacking even the basic elements of application of the most significant

arguments raised by them earlier in the paper with respect to these groups, such as exploiting the benefits of returns to scale or product diversification.

This section will compare the possible results of forming different consolidated banking groups by using a translog cost function to appraise the cost increase or decrease resulting from consolidation. **The consolidation program can be treated as a series of mergers and acquisitions** initiated and undertaken by the state. Restricted private participation is allowed, but it was assumed that private interests would enter only after the completion of the process. Therefore, the methodology used to evaluate the effects of mergers and acquisitions in banking can be employed to identify the best partners for these operations.

The main motives for banking mergers can be divided into two groups: technical and organizational. **Technical reasons** include the more efficient use of computers, the branch network or other physical resources. **Organizational reasons** involve exploiting increasing returns to scale, improving competitiveness by combining different specialization, and increasing market shares. Additionally, it is assumed that a merger (or an acquisition) will be a faster and more efficient way of expanding than relying on the internal growth of the organization. However, all motives for consolidation in banking can be empirically examined for any particular group of banks. The **commonly used returns to scale argument may not hold** if we consider that some empirical studies do not find evidence of returns to scale in the US banking system (Gilligan and Smirlock, 1984) or in Europe (Gough, 1979; Drake, 1995). Moreover, other research has found that only certain groups of banks, for example the largest in country, are characterized by increasing returns to scale (Clark, 1984; Kolari and Zardkoohi, 1990). However, recent study (Berger and Mester, 1997), based on the 90's data, found economies of scale in a wide

spectrum of banks. Authors argue that the change could have been triggered by the progress in information technology and/or deregulation in banking.

Molyneux *et. al.* (1996) distinguish between two strands of research on mergers and acquisitions in banking. **Event-day studies** describe mergers and acquisitions that actually took place. They compare pre- and post-merger financial results and draw conclusions about whether any improvements occurred. The majority of these studies has not found evidence that mergers have resulted in significant improvements. The second group of studies, **cost and profit function bank merger studies**, simulate the effects of hypothetical mergers. This methodology aims to identify the groups of banks that could achieve the greatest reduction of costs (or increase of profits) when merged. This approach also allows forecasts of the possible results from mergers of any, arbitrarily chosen, pair of banks. On the other hand, the negative aspects of consolidation, including decrease of market competitiveness and expected problems with managing large organizations, as presented in Miklaszewska and Szemplinska (1994) and Baka (1994), are difficult to quantify.

In order to present the potential effects of the consolidation plans proposed by Bonin and Leven (1996) and the recently created banking groups in Poland, calculations based on the modified method in Molyneux *et. al.* (1996) will be employed. This procedure assumes that the consolidated bank is simply the sum of the given individual banks and that there are no further cost synergies resulting from the restructuring of the product mix and the merged portfolio. Within this framework, the internal efficiency of banks does not change, but the effects of scale and scope are evaluated. On the other hand, some additional costs caused by the merger procedure, e.g. legal costs, are also not taken into account.

In such a procedure choice of cost function form becomes an important issue. In fact, the duality between cost function and transformation

function ensures that they both incorporate the same information about production properties. One of the most widely used flexible forms for a cost function is a transcendental logarithmic functional form, which is based on a second-order approximation in logarithms (Taylor series based) for an arbitrary deterministic functions. The general form of the translog production function can be expressed as:

$$\ln Q = \alpha_0 + \sum_{i=1}^{n} \alpha_1 \ln X_i + \frac{1}{2} \sum_{i=1}^{n} \sum_{j=1}^{n} \alpha_{ij} \ln X_i \ln X_j \qquad (4.1)$$

where X are the quantities of inputs.

Using duality principle[65] the following translog cost function can be derived:

$$\ln TC = \alpha_0 + \sum_{i=1}^{n} \alpha_i \ln Q_i + \sum_{i=1}^{n} \beta_i \ln P + \frac{1}{2}\left(\sum_{i=1}^{n} \sum_{j=1}^{n} \beta_{ij} \ln Q_i \ln Q_j + \sum_{i=1}^{n} \sum_{j=1}^{n} \gamma_{ij} \ln P_i \ln P_j\right) + \sum_{i=1}^{n} \sum_{j=1}^{n} \sigma_{ij} \ln P_i \ln Q \qquad (4.2)$$

where: TC is total cost, Q_i is output *i*, and P_i is the price of input *i*.

The empirical approach used here assumes that bank outputs are measured as total loans and the balance sheet sum. This modifies slightly the methodology of Kolari and Zardkoohi (1987) and Molyneux *et. al.* (1996), in which total loans and securities were used, because the data on securities were unavailable. Two variable input prices are used depicting the average price of labor and the price of deposits respectively. This approach follows Molyneux *et. al.* (1996), but no measure for the price of capital was available.

Therefore, the following data were used:

A. Dependent variable:

TC - total costs consisting of interest paid plus fee and commission expense plus general expenses in 1995.

B. Independent variables:

Q_i - outputs:

bal - balance sheet sum at the end of 1995,

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65 For a formal proof see: Diewert (1974).

cre - credit volume at the end of 1995.

P_i - input prices:

avwag - average wages i.e. total wage expenses divided by the average number of employees in 1995,

avdep - average interest on deposits i.e. total interest paid divided by the total volume of deposits at the end of 1995.

Function (4.2) was estimated by OLS using data from 65 Polish banks for the end of the financial year 1995 based on "Gazeta Bankowa" and "The Financial System in Poland" (1996). The results are given in Table 4.5. The estimated function was tested for heteroscedasticity using an F-test based on the regression of squared residuals on the squared fitted values. No evidence of heteroscedasticity was found.

Table 4.5 Results of the cost function estimation

Variable	*Coefficient*	*Standard error*	*T-ratio*	*p - value*
const	0.042	2.055	0.020	0.98
ln(bal)	1.252	0.738	1.696	0.09
ln(cre)	-0.622	0.644	-0.967	0.33
ln(avwag)	0.290	0.597	0.485	0.63
ln(avdep)	0.729	0.342	2.130	0.038
ln(bal)*ln(cre)	-0.010	0.013	-0.773	0.44
ln(avwag)*ln(avdep)	0.062	0.092	0.672	0.51
ln(bal)*ln(avwag)	0.161	0.206	0.782	0.44
ln(bal)*ln(avdep)	-0.132	0.080	-1.648	0.11
ln(cre)*ln(avwag)	-0.255	0.189	-1.248	0.18
ln(cre)*ln(avdep)	0.088	0.044	1.994	0.05
R-Squared: 0.974 Adjusted R-Squared: 0.969		F-statistic: F(10,54)=198.3 (.000) N=65		

Source: Author's calculations

After the overall cost function was estimated, data were entered into the estimated function for each particular bank and a "consolidated bank" that is the sum of the given banks. If the sum of the predicted costs of the separate banks exceeds the hypothetical "consolidated bank's" costs, we predict cost reductions due to the consolidation. Put differently, using the cost function estimation, for each group of banks formed as suggested in Bonin and Leven (1996), the sum of the predicted costs for the unmerged banks was compared with the predicted costs for the hypothetical merged banks. **The merged bank is, in this framework, the sum of the given individual banks**. Therefore, outputs, i.e. the balance sheet sums and the credit volumes, are simply added and the input prices, i.e. average deposit interest and average wage, are weighted by the deposit volume and number of employees respectively, averages of those for individual banks and used in the regression equation. The results of these calculations are given in Table 4.6. Additionally, predicted cost reductions are given in real terms, as the volume of cost reduction is affected by the size of the "consolidated" banks. All of the hypothetical groups described by Bonin and Leven (1996) are expected to achieve significant cost reductions from consolidation. Rows 4 and 5 in Table 4.6 depict similar results for the groups actually established by the Ministry of Finance in October 1996, while rows 6 and 7 give the results for the two smaller private-led groups.

Table 4.6 Predicted cost reductions due to mergers

	Bank Group	Predicted cost reduction as a percent of total costs	Predicted cost reduction in millions PLN
1.	Powszechny Bank Gospodarczy (PBG) in Łódź Bank Zachodni (BZ) in Wrocław Pomorski Bank Kredytowy (PBKS) in Szczecin Bank Depozytowo Kredytowy (BDK) in Lublin Bank Handlowy (BH) in Warsaw Polski Bank Inwestycyjny (PBI) in Warsaw	13.73%	472
2.	Polska Kasa Opieki (PeKaO SA) in Warsaw Powszechny Bank Kredytowy (PBK) in Warsaw Polski Bank Rozwoju (PBR) in Warsaw Pierwszy Bank Komercyjny (PBKom) in Lublin	9.27%	293
3.	Bank Ślaski (BSK) in Katowice Bank Przemysłowo Handlowy (BPH) in Krakow BIG Bank (BIG) in Warsaw Bank Gdański (BG) in Gdansk Bank Rozwoju Eksportu (BRE) in Warsaw Kredyt Bank (KB) in Warsaw Wielkopolski Bank Kredytowy (WBK) in Poznań	17.71%	521
4.	Polska Kasa Opieki (PeKaO SA) in Warsaw Powszechny Bank Gospodarczy (PBG) in Łódź Bank Depozytowo Kredytowy (BDK) in Lublin Pomorski Bank Kredytowy (PBKS) in Szczecin	8.08%	302
5.	Powszechny Bank Kredytowy (PBK) in Warsaw Polski Bank Rozwoju (PBR) in Warsaw	5.21%	49
6.	Kredyt Bank (KB) in Warsaw Polski Bank Inwestycyjny (PBI) in Warsaw	6.38%	31
7.	BIG Bank (BIG) in Warsaw Bank Gdański (BG) in Gdańsk	5.29%	34

Source: Author's calculations based on translog cost function

The results of this calculation generally support the case for Polish bank consolidation proposed by Bonin and Leven (1996) and reflect increasing returns to scale in the Polish banking industry as described in Section 1.6. The best results could be obtained by merging seven private or recently privatized banks (row 3, Table 4.6). However, this proposition is practically infeasible, due to incompatible ownership characteristics. The ownership structure of the banks in this group is very diverse, ranging from majority foreign ownership (e.g. BSK with majority of shares owned by ING Bank and WBK by Allied Irish Bank), through those with some foreign participation (BRE with minor Commerzbank participation or KB with some shares owned by Krediet Bank from Belgium), to almost exclusively Polish private ownership (BIG). A number of these banks are already starting to pursue their own consolidation strategies. As mentioned, BIG acquired a significant stake in BG while WBK has acquired two smaller banks. Both of the groups that include PeKaO SA (rows 2 and 4, Table 4.6) achieve similar levels of cost reduction, probably due to the dominant position of PeKaO SA in each group. The hypothetical bank group containing the biggest Polish bank, BH (row 1, Table 4.6), could achieve significant cost reduction. However, BH has recently been privatized separately and has thus been excluded from any government consolidation programs. The four groups actually created (rows 4, 5, 6, 7 in Table 4.6) are expected to achieve modest cost reductions in comparison to the other hypothetical groups.

The cost function approach is a static tool for obtaining an approximation of the potential results of bank mergers. Dynamic effects should occur in the long - run, thus allowing for higher than predicted gains from consolidation. However, several problems might be encountered during the consolidation procedure. On the one hand, government-sponsored programs may, for political reasons, match partners incorrectly and thus promote mergers with a low level of cost reductions. On the other hand, consolidation led by

private banks may lead to a dilution of ownership and strengthening the managers' position at the shareholder's expense. The empirical evidence provided confirms that, in each case of potential mergers, partners should be carefully selected because of the large differences in possible cost reductions.

One should notice however that the predicted cost reductions are relatively low, ranging around 5% of net banks' profits. Moreover, both state-sponsored group consolidations took a rather weak form, with PBK - PBR group being abolished in 1998. With the PeKaO Group the first two years of consolidation did not significantly change the conduct of the regional banks. Due to political reasons regional banks maintained a significant degree of independence, while the consolidation process was mainly reflected in the uniform design of the branches' interiors and a slow adjustment of IT systems. A number of administrative structures were still duplicated in each banks. Only in 1998, after the political changes of the 1997 election, it was decided that the bank would actually be merged. In fact three regional banks will be incorporated into the PeKaO structure. The main motivation was to increase the bid price for PeKaO, which is due to be privatised. However, it is still unclear whether the sale of each regional bank could be a more pro-competitive solution which could result in better revenues. Additionally, the creation of the largest bank in Poland (the name will be probably changed to Bank of Poland) will increase the probability of serious controversies stemming from its forthcoming privatisation, which might cause significant delays of this process. Moreover, this solution will clearly result in larger market concentration, thus creating less competitive environment.

4.4. Conclusions

Foreign investment in the banking sectors of the EE countries encountered a number of market-inherent and regulatory barriers. A review of the main policy issues in the regulation of banking activities and some frequently applied arguments for the justification of protectionism in this area were discussed in this chapter. Survey results indicate that non-transparent regulations are the most important impediments to investment in the countries in question. However, future activities are expected to be hindered by market-inherent or internal obstacles such as the lack of proper staff or rising cost levels.

A perceived lack of regulatory transparency should be partially attributed to the protectionist approach adopted by EE regulators. **Discriminatory policies were applied against foreign investors**, while some preferential policies supported the domestic banking sector. Particularly, discriminatory policies were clearly visible during privatisation of the state commercial banks. In the area of licensing, domestic banks were protected against tough foreign competition by license moratoriums in Poland and the Czech Republic, and later by an implicit fee policy in Poland. Other instruments which have been used include selective procurement practices, tax differentiation and enforced consolidation of state - owned banks in order to increase their market power and resistance to competition.

Whatever the motivation or justification, **protectionist policies have generally failed**. The erected barriers were too weak to defend against the foreign competitors, and only contributed to the slowing down and prolongation of the restructuring of domestic banks. The **Polish** bank consolidation programme has so far and is expected to continue to have a limited influence on banks involved. On the other hand, the **Hungarian** case,

where protectionist barriers were dismantled relatively quickly, proves that the suspicions of the impact of foreign dominance in the banking sectors are not justified. Moreover, after an initial wave of direct "greenfield" entry, subsequent entries focused on existing domestic banks. In the EE circumstances, the dominance of foreign banks is therefore a logical corollary of sector underdevelopment and capital weakness. The future set-up of these countries' banking system will probably be characterised by the dominance of foreign capital in the area of bank ownership, but with a limited share of foreign banks as direct service providers. This fits correctly into world-wide globalisation and consolidations trends.

Chapter 5. Costs and benefits of foreign entry

This chapter discusses the costs and benefits of foreign entry into the banking sectors of the East European countries. The theoretical background for this analysis will be presented and a general appraisal of these banks' activities in Eastern Europe will be conducted. In order to appraise the potential need for foreign entry, a Structure-Conduct-Performance (SCP) model will be used.

5.1. Theoretical background

Foreign entry in the banking sector is hardly a new invention. However, interest in the evaluation of the costs and benefits of these entries has increased recently (Wengel, 1995) due to the rapid growth of this activity and the overall development of banking services. The same relates to Eastern Europe, where foreign entry has been observed only for the past few years and clearly could occur due to the socio-economic changes of the 1990s. The literature which attempts to set a theoretical background for the appraisal of the effects of banking FDI in a global context is relatively small. Consequently, the literature relating these issues to the EE context is even weaker (see next section).

Tschoegl (1989) discusses the possible benefits and costs of hosting foreign banks in offshore centres, but the analysis can easily be extended to foreign banks in any country. He distinguishes between **direct and indirect costs and benefits associated with foreign entry**. Direct benefits and costs include those economic categories which can be directly attributed to foreign entry and at least in case of benefits, are to a great extent empirically computable. Moreover, the direct benefits and costs are similar to those in any other sort of FDI.

According to Tschoegl (1989), the following ***direct benefits*** can be distinguished:

- **Employment growth** caused by the hiring of employees by foreign owned banks. This category is quite straightforward in the case of newly established affiliates of foreign banks, while in the case of take overs of existing banks some job losses may occur. However, the general impact in this area is measurable by calculating the number of employees in foreign owned banks. In countries such as the offshore centres of Panama or Bermuda, foreign banks are responsible for up to 35% of overall employment in the banking sector. Additionally, expatriate salaries (which in most cases are significantly higher than domestic ones) contribute up to 1% of GDP in the case of Panama (Tschoegl, 1989). One should note that from the perspective of the domestic economy, the overall number of jobs created by foreign banks is small in absolute numbers.

- **Government revenues.** This includes taxes paid by foreign entities plus quite often licence fees. This category may also cover implicit fees, such as those described in Chapter 4. Although these do not constitute direct government revenues, their use saves some amounts that ought to be spent otherwise.

- **Direct expenditures.** Banks' operations involve expenditures which affect the economy through a multiplier effect. In order to calculate these effects, some assumptions have to be made about the multiplier volume and expenditures ratio, as the latter is not computable from banks' financial statements. For the purpose of calculation, in the case of Panama, the multiplier used for the calculations was equal to 1.75, while the expenditures ratio amounted to 0.3% of assets.

- **Human capital formation**. Foreign banks usually contribute to human capital formation when employees receive training and learn new skills. Unlike other direct benefits the impact of this factor is difficult to calculate. Banks training expenses can vary and are practically untraceable from financial reports.

The ***direct costs*** of foreign bank presence involve:

- **Investment in required infrastructure**. FDI in banking will occur only when some minimum requirements regarding physical and organisational infrastructure are fulfilled. In the EE situation, very early costs related to foreign banks' entry were related to meeting legal and accounting regulations that were later amended several times, again involving significant costs. Physical infrastructure is less significant for banks' entry decision (see Chapter 4), but it can severely influence banks' further development, affecting customers' positions directly and also for example, credit opportunities. Both "regulatory" and "physical" investment outlays are difficult to quantify as they involve indirect expenses and are spread accros a number of institutions.

- **Costs of supervision**. These costs should be understood as additional expenses linked to overseeing new entrants in the sector. Additionally, some forms of foreign entry such as branches require the establishment of special, non-standard supervisory rules and techniques. As with the previous category of direct benefits, supervisory costs are difficult to calculate as they are spread across different institutions. Generally, it is practically impossible to split the costs of supervision of domestic institutions from the costs of supervision of foreign owned banks.

- **Tax waivers and other incentives**. These reduce the expected tax revenues from foreign entrants. Although it is hard to trace the exact value of these reductions, the overall tax revenue from foreign banks will simply give the amounts paid, adjusted for the tax preferences granted.

The indirect benefits of foreign entry are associated with more general effects caused by the presence of foreign banks. These are difficult to estimate as, unlike direct benefits, they cannot be attributed to any particular bank. Indirect benefits affect the economy as a whole and are perceived to be much more significant than those of direct character. One can think of direct benefits as being microeconomic ones, while indirect effects constitute macro effects. In particular, ***indirect benefits*** of foreign banks presence include:

- **Facilitation of the country's access to capital**. Familiarity with the host country increases banks' willingness to lend to that country. Also the presence of respected banks in most cases improves the host country's reputation. However, only limited empirical evidence can be presented to justify this argument, as reputational gains are difficult to measure and can be attributed to several factors.

- **Foreign banks' presence affects the efficiency of domestic banks**. This is one of the most important arguments used to support foreign bank entry, especially in the Eastern Europe. Perceived indirect benefits have two dimensions. Firstly, additional entrants increase price competition on existing services. However, according to Tschoegl (1989) this supposition generally lacks empirical evidence. Foreign banks rarely compete on a price basis, and this competition, if it occurs, is restricted to some corporate services. The second type of indirect benefits is drawn from the introduction of new services. Foreign

banks, especially these operating on a global scale, are perceived to be leaders in the field of financial innovations. Once again, these benefits are difficult to measure, although some instruments introduced by foreign banks can be listed.

The entry of the foreign banks also incurs some ***indirect costs***, as foreign banks limit the government's ability to perform several economic policies, for example the cross-subsidization of selected sectors with the participation of banks' funds. In this context, the scope of state ownership in banking is expected to be negatively correlated with openness to foreign banks and the will to establish a market - based environment for their operations.

A similar list of benefits stemming from foreign entry is given in Chang (1989). He adds the effects of openness on the stimulation of the development of related industries, such as law firms, insurance, etc., as well as the enhancement of national prestige and security. On the side of indirect costs, he lengthens Tschoegl's list by adding disrupting impacts on domestic monetary policy, which include:

- the inflationary effect linked with the inflow of a substantial amount of foreign currency;
- the adverse impact on domestic interest rates, as they tend to follow volatile global markets more closely;
- the adverse impact on domestic economic policy which comes to depend more on foreign funds that might be withdrawn;
- capital leakage abroad through foreign banks;
- inflow of speculative funds;
- fiscal problems associated with different treatment of foreign funds and revenues.

It must be noted that the impact of foreign banks' presence is extremely difficult to separate out from the influence of general macroeconomic policies in all of the given categories. It is often treated as negligible, especially if the macro aims are consciously targeted by powerful macroeconomic policy instruments. However, in some cases, for example those linked with inflow of speculative funds, the role played by foreign banks cannot be underestimated. On one hand, foreign banks' presence improves the country's reputation and improves the willingness of foreign investors to enter the given country. On the other hand, all categories of investors are attracted, including speculative ones, which in most cases are regarded as undesirable.

Theoretical aspects of cross-border entry in retail banking are also analysed by Hoschka (1993). He poses four hypothesis related to such entry:

1. Cross-border entry can increase price competition.
2. Cross-border entry can reduce X-inefficiency.
3. Cross-border entry can spoil collusive domestic equilibria.
4. Cross-border entry can increase quality and variety of services.

He argues that the majority of these effects can occur if cross-border entry is associated with higher efficiency of the entering bank, or an improvement in efficiency in the acquired bank. However, careful analysis is required, as "[f]oreign entry may lead to lower domestic social welfare, as rises in consumer surplus may be outweighed by losses in domestic producer surplus" (p.155).

On the empirical side, the question of foreign presence in the banking sectors of the given countries has been analysed in detail in the course of European integration. The main question addressed by this research is the influence of the expansion of European banks (and other financial services

providers) to other countries of the EU, as was expected due to the implementation of the principle of mutual recognition. The 1988 Price Waterhouse study on the "cost of non-Europe" was a milestone in its attempts to quantify the likely effects of integration on the prices of financial products. The direction of this study was later followed by Gardener and Teppet (1992) and Hoschka (1993) in, respectively, an assessment of the integration of the financial markets of EFTA countries, and a more advanced and updated appraisal of the effects of EU internal integration. Basically, all of these studies involve a sample of selected financial products for which current prices or margins in given countries are identified. Then the average price of the lowest observations is calculated for each product and taken as a benchmark for possible price reduction after integration. After some adjustment these prices are compared with the current price level, thus allowing for an appraisal of the potential integration effects for the surveyed countries. The assumed effects are thus the result of an expected cross-border entry facilitated by integration, and unrestricted access to financial service providers supplying these services at the lowest price in the integrated area. Expected price reductions can be subsequently used to calculate welfare effects stemming from integration. In this framework, the estimated gains in consumer surplus from integration for the eight EU countries included in that study amount on average to 0.7 per cent of GDP. A modified approach was used by Dietrich (1991), who investigated differences in the value added of European banking sectors. He focused on the possible effects of the expected equalisation of banking services value added, thus analysing the intersectoral effects of integration rather than the overall economic benefits. Another dimension of research was undertaken by Schmid (1993) through a spatial competition model, the welfare effects of bank branching were investigated and analysed using data from four European countries. Obviously, this type of analysis does not allow any distinction between

foreign bank branches and domestic ones, but one can assume their perfect substitution in such a framework. In all analysed countries, a decrease in the number of branches would have been socially undesirable, while to some degree the opposite hypothesis of a positive relation between the number of branches and the price level decrease also does not hold. However, results differ for selected time periods and selected countries. In a study on state-wide and interstate branching in the US, Jayaratne and Strahan (1996) show that bank performance improves significantly after restrictions on bank expansion are lifted. The improvements occur because banks grow at the expense of their less efficient rivals. However, most of the reduction in bank costs are passed along to bank borrowers in the form of lower loan rates. This once again underlines the necessity of costs/benefits analysis. However, generally the feasibility of such an analysis is hampered by lack of the data and the weakness in the methodology.

Empirical methodology which directly evaluates the effects of financial integration is a useful tool in discussing the potential effects of foreign entry. Some differences between these two issues can be identified, but assumptions about price effects are similar for entry and the integration process. In fact, integration assumes unrestricted entry, and thus should be treated as an upper benchmark for estimates of the benefits of entry. Closer analysis of the Price Waterhouse (1988) methodology reveals several theoretical bottlenecks of this approach, such as a disregard for possible cross-subsidisation of particular banking products and a different level of competition on banking service submarkets. Additionally, several caveats are linked to the statistical and data collection methodology. However, Price Waterhouse (1988) and the other studies listed above which applied analogous methodology were "a heroic attempt to include both international trade theory with industrial trade theory, to provide us with the first step towards attempting to evaluate the benefits and costs of financial sector integration" (Molyneux *at al.*, 1996, p.46). Performing

similar research for the EE countries applying for membership in the EU, can be a very useful exercise, although beyond the scope of this study.

5.2. Appraisal of foreign bank operations in Eastern Europe

The entry of foreign banks has been the subject of several controversies, raised not only from the political viewpoint but also in the theoretical literature. Generally **it is suggested that the benefits from foreign entry in the banking sector are relatively modest and should be carefully scrutinised** (see references in previous section). However, the overwhelming attitude of authors from outside the region addressing these questions in the context of Eastern Europe is that foreign entry is an almost immediate panacea for most problems in these countries' banking sectors (Wachtel, 1995; Buch, 1996; Bonin and Leven, 1996; Sabi, 1995). High long-term efficiency, better technology and managerial skills are assumed *a priori* advantages of foreign banks vis-a-vis domestic ones. Most of these arguments are in line with Wachtel's (1995) blunt statement:

> International and foreign banking activity is particularly important in the economies in transition for two reasons. First, the activities of MNCs (multinational corporations) and international activities of existing large firms are likely to be leading growth sectors in the EITs (European economies in transition). These are just the market sectors where foreign banks are able to provide services. Second, the banking industry in the EITs was until quite recently entirely state owned and continues to suffer from technological inefficiencies. Thus, the industry is ripe for joint ventures, cross ownership and foreign bank entry as part of both the privatisation process and the development of a modern banking sector. The entry of foreign banks is likely to have profound effects on the competitive environment and the provision of services in domestic markets. Even relatively small foreign ventures in the domestic

> markets can have spill over effects that will influence banking practices generally. (p. 3)

Wachtel also dismisses some arguments against foreign banks. In his opinion, fear of foreign control of the economy is not justified as "[i]t would be silly to restrict foreign direct investment unless the domestic economy has sufficient domestic savings to finance growth" (p.15), and "[i]t would be silly for a country that can benefit from increased investment to restrict FDI and foreign banks are simply FDI in the financial services industry" (p.17). Moreover, he argues that foreign banks by themselves constitute one of the most stable parts of FDI. The infant industry argument is also rejected as foreign-owned banks are not importers and this argument cannot be used for protection of fundamentally inefficient domestic banks. Some allowance for restricting foreign access can be made because of the possible social costs from domestic bank failures, but the mercantilist view of foreign banks pursuing the objectives of the home country to the detriment of the host country cannot be accepted. However, Wachtel noticed that foreign banks may neglect some areas of activity, for example SME lending. Additionally, these banks should be admitted only when the regulatory structure is satisfactory and banking supervision has developed properly. The beneficial effects of foreign banks activities in EE countries are connected, in his opinion, with product and service innovation, the creation of a competitive environment, increased economies of scale and scope, financial market development, and finally, with spillover effects in good banking practice and industrial FDI.

Buch (1996b) argues that foreign banks can play a positive role in the privatisation of banks by acquiring ownership stakes or by forming twinning arrangements with domestic banks. Benefits of this investment come from know-how transfer and improvement of the corporate governance of domestic privatised banks. However, she is more reluctant to express an unreservedly positive view of foreign banks. In her view, it is also likely that domestic banks

have absolute cost advantages in certain activities. Even if unrestricted access of foreign banks is granted, they may chose not to enter certain traditional businesses of domestic banks, and may restrict their activities to some market subsegments as trade financing and corporate banking. Not surprisingly, she notes that the new (also foreign) banks are likely to have higher operational costs due to the lack of a branch network. Foreign banks are, however, expected to have access to superior technologies that allow them to have a lower cost level. "In summary, most arguments against the market entry of foreign banks are based on a partial equilibrium model which fails to take account of positive welfare effects of FDI in banking" (p.13)

On the other hand, authors from EE countries (e.g. Szekely, 1995; Jaworski, 1996; Dobosiewicz, 1995) cast **doubts over the benefits from foreign entry** into banking systems of these countries. Particularly, as Szekely (1995) emphasized, in the Eastern Europe the nature of the business strategies of foreign and joint venture banks turned out to be quite different from what policy makers expected. In his opinion, foreign banks concentrated in areas where the profit-risk ratio is the highest and where activities can be expanded rapidly. Moreover, it is often argued[66] that foreign banks have contributed to an increase in competition during the short period of the early stages of transition. Thus there is no point to the further promotion of their entry, particularly through the sale of large domestic banks to foreign investors. Foreign banks were special "agents of change" during the first phase of transformation, but their increased presence is not desired later.

In this context, an interesting profile of foreign bank operations is presented in Grahl (1996). He studied in detail the activities of seven Hungarian banks, including five with 100 per cent foreign ownership. Most of researched banks did not serve ordinary people, offering their private banking services to a

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66 As argued by A.Wolski; deputy director of the Polish Banking Association, in "Bank" 4/1998.

few high net-worth individuals. All of these banks focused on large companies, each serving on average 100 corporate clients. The number of small and medium size companies among banks' customers was positively correlated with the number of branches. All banks offered electronic banking services, and most offered and advertised advanced trade and FX services such as factoring, forfeiting and forward currency deals.

In order to evaluate the direct effects of foreign entry, this section will use Tschoegl's (1989) classification, as presented in section 5.1, to investigate the direct benefits and costs of foreign entry in the selected EE countries. Attempts to appraise the indirect effects of foreign entry have been presented in case studies (Chapter 3) and in the general description of the banking sectors in Chapter 1. However, as described in the previous section, these effects are difficult to separate from the overall macroeconomic picture, and even a rough estimation of indirect effects requires data collection beyond the scope of this dissertation.

The direct benefits of foreign entry include:

(a) *Employment growth*. This category will be measured by calculating the number of employees in newly created banks with significant foreign participation. Employees from banks taken over by foreign investors or with minor foreign participation are excluded, as job creation in these banks cannot be directly attributed to foreign investment. No detailed data were available for the Czech Republic, although according to Benacek and Zamplinerova (1997) the share of number of workers in banks with foreign capital was equal 5.1% of all banks employees in 1995. The data for Poland and Hungary are presented in Table 5.1.

Table 5.1 Foreign banks employees in Poland and Hungary

Country	*Year*	*Number of employees*	*As a percentage of all banks' employees*
Poland	*1994*	1122	1.1%
	1995	1604	1.4%
Hungary	*1994*	2090	10.9%
	1995	2704	14.1%

Source: Author's calculations based on "Gazeta Bankowa" and "Hungarian Bank Almanac". No data available for cooperative banks in Poland.

The number of foreign bank employees in Poland is very low, taking into account the volume of foreign capital invested in the Polish banking sector. In terms of value most of this capital was spent on purchasing existing banks, thus without creating new jobs. Destruction of some jobs in smaller banks was in fact prevented by foreign entry as otherwise these banks probably would have gone bankrupt (Interbank both in Warsaw and Prague). However, the most of the employment linked with foreign capital is in the large privatised banks (WBK, MKB, Bank Śląski). The majority of these jobs existed before privatisation, and some reductions took place afterwards. Yet also, a number of positions were created in institutions established by foreign investors and associated with these banks such as investment funds, brokerage offices etc.

In the space of just over one year (1995), the number of new jobs created by foreign banks in Hungary amounted to more than 3% of total banking sector employment. However, in the same period, significant job cuts occurred in large banks, such as MHB or Budapest Bank, which were taken over or were about to be taken over by foreign investors. As **control acquisitions by foreign banks are usually linked with significant job reductions**, the direct benefits of employment growth may not occur other than through greenfield investment. These reductions resulted from perceived overstaffing in certain departments, but also from replacement of some employees by modern technologies. Thus,

cuts generally contributed to growth in efficiency per employee. On the other hand, new owners often reduced the number of employees dealing with less profitable activities, for example services for SMEs. New jobs have significantly different characteristics comparing to liquidated jobs. Overall, no significant growth in the number of jobs took place, but the newly created jobs required highly qualified specialists, while liquidated jobs were usually less skilled and less efficient.

(b) *Government revenues*. Foreign banks contribute to government revenues in various ways. Primarily, they pay corporate taxes on their profits. Incomes of banks' employees are also taxed and are subject to social contributions. VAT is charged and paid on some specific services, although generally most of banking services are excluded from VAT. Last but not least, banks are subject to various licence and administrative fees, including those charged on the implicit base (see section 4.3.2).

Data on corporate taxes are available for Poland and Hungary. For **Hungary**, as in the calculation of employment growth, only banks created by foreign capital are taken into account. In 1994, foreign banks paid taxes of 2.36 bn HUF, equal to around 21.5 mln USD. In 1995, these values amounted to 5.84 bn HUF and 41.7 mln USD respectively.

For **Poland**, more detailed GUS statistics are available. In 1996, banks with 100 percent of foreign capital paid a total of 88.7 mln PLN in corporate tax, equivalent to 30 mln USD. If we take into account a wider category of banks with foreign majority ownership these amounts grow to 354.7 mln PLN (120 mln USD). This constitutes 19% of total corporate tax paid by the entire banking sector, while the aforementioned tax paid by 100 percent foreign owned banks amounts to a mere 4.7% of banking sector taxes. One can say that foreign banks successfully avoid excessive taxation, as 19% of total taxes is

much lower than their 27.7% share in the total capital of the sector (see Table 1.5). However, in 1996 foreign banks profits (tax base) amounted to 13.3% of the sector's profits. Thus, these banks have paid a larger share in taxes than in sector profits. One of the reasons contributing to the more than proportional tax payments can be the tax relief granted to some domestically owned banks. This provides another interesting point of discussion of taxes as an instrument of discrimination against foreign banks (section 4.3.2.). On the other hand, one may argue that the profits of taxed foreign banks were already lower due to the transfer pricing mechanism (see section 4.2.2). In 1997, a similar tendency could also be observed in banks with a foreign majority shareholding, having a 15.5% share in the sector's profits and 20.1% share in taxation.

(c) *Direct expenditures.* For purposes of calculation, the same assumption as in Tschoegl (1989) are made. That is, the ratio of expenditures to bank assets is assumed to be 0.3%, while the multiplier equals 1.75. Using these parameters, the volume of expenditures of 100 percent foreign owned banks in **Hungary** can be estimated at a level equal to 30 mln USD equivalent, and in **Poland** at 13 mln USD level in 1995. These are not significant amounts in terms of the whole economy. However, in most cases these expenditures are made on the products of most advanced branches of industry, such as computers, telecommunications, etc. Thus, although in general terms banks' expenditures can be viewed as insignificant for the whole economy, they certainly contribute to the development of advanced sectors, where foreign banks are important customers. In comparison to domestic banks' expenditures, one may expect that foreign banks will spend more on adjusting certain IT products to local circumstances and purchasing import - substituting products.

(d) *Human capital formation*. These benefits of foreign entry are hard to quantify. Generally, at the beginning of their activities foreign banks recruited experienced employees and supplemented them with expatriate personnel. Later, when large staff turnover started to occur due to the great demand for qualified specialists, banks tended to react in two ways. As mentioned in section 4.3.1, some foreign banks became "salary leaders", trying to attract the best staff available. The second solution was to adopt a comprehensive training programme for new employees. Obviously, most banks applied both solutions simultaneously. However, according to a number of the interviewed banks' officials, the second solution delivered better results, leading to a decrease in staff turnover and increases in efficiency. The overall influence of foreign entry on human capital formation is perceived to be significant for the sector. Partial evidence can be given by, for example, studying the CVs of high officials in the Polish government. A number of these officials, especially in the ministries dealing with the economy, had longer or shorter episodes of work for foreign owned financial institutions, most often in banks.

The **direct costs of entry** are even more difficult to quantify. *Investment in infrastructure,* apart from investment in technical infrastructure which can be viewed as minimal or almost equal to zero, involved setting up new regulations related to the foreign sources of banks' capital. However, regulations regarding foreign banks are usually just an extension of regulations of the banking sector as a whole. Therefore, the specific costs of creating legal infrastructure for foreign bank operations can be viewed as minimal. The same relates to the *cost of supervision,* which should be performed regardless of the origin of the bank's owners. *Tax incentives,* granted generously in the first period of transformation were later withdrawn and even replaced by some tax instruments discriminating against foreign banks (see section 4.3.2). Therefore

the direct costs of foreign entry should be appraised as insignificant and much lower than the direct benefits listed above.

5.3. SCP Model in entry evaluation

5.3.1. Theoretical background

Theoretical reasoning in general links the possible welfare effects of foreign entry in banking services with the current stage of market development in the host country. Market structure is thus an important factor which has to be taken into account while analysing these effects. The one of the most important questions in describing a certain market is t**o what extent the market structure influences a given bank's performance**. The structure of any market is determined by a range of economic and non-economic factors. Apart from the regulatory framework, several factors affect the structure of each country's market. Applying the industrial economic theory to banking suggests that there is a link between market structure and bank performance. This hypothesis emerged as the **"structure - conduct - performance" (SCP)** approach (Heggestad, 1979; Molyneux and Forbes, 1995). According to Heggestad, the SCP model is a general statement on the determinants of market performance. Simply stated, the conduct or the rivalry in a market is determined by market structure conditions, especially the number and size distributions of firms and the condition of entry. To support the SCP hypothesis, the impact of market concentration on the performance of the firm should be positive, regardless of the degree of efficiency of the firm.

An opposite hypothesis to the SCP theory is the **"efficiency hypothesis"**. This hypothesis assumes that an industry's structure arises as a result of higher operating efficiency by certain firms. In the framework of this hypothesis, higher firm profits emerging from internal efficiency lead to gains of a

higher market share. In turn this causes increased market concentration. The efficiency hypothesis might be supported if the performance of firms depends on its market share regardless of the degree of concentration in the market. Evanoff (1988) finds that this "firm-specific efficiency" seems to be the dominant variable explaining profitability in the US banking system. However, different results are obtained for European banking markets by Molyneux and Forbes (1995), which strongly supports the SCP hypothesis.

According to Heggestad (1979), the overall rationale for testing the SCP relationship in banking markets is to address three main issues:

> First, does market structure matter, or is the banking industry so highly regulated that market structure is simply not a relevant factor in determining market performance?
> Second, which aspects of market structure are most important, and, therefore which types of regulatory reform will have the greatest impact?
> Finally, what aspects of bank performance are most sensitive to differences in market structure? (p.450)

Analysis of the SCP relationship in banking is a very useful tool for evaluating and establishing the main policy issues. Generally, the regulation of the banking industry must fulfil two important but to some extent contradictory tasks. It has to stimulate efficiency in banking services, but it also must maintain a certain minimum of security and stability of the market. However, as in other industries, the more competitive the market, the more efficient are the firms that survive. If we assume that economies of scale in the banking industry exist, then there is a natural tendency for an increase in the size of banks that are able to gain from scale. As Molyneux and Forbes (1995) state, the traditional interpretation of the SCP paradigm is based on the proposition that market concentration fosters collusion among firms in the industry. From the point of view of the regulator, a monopolistic banking industry is more compatible with

the policy objective of maintaining stability in the banking sector, while competition promotes the goal of efficiency. If the SCP hypothesis is confirmed in banking markets, this would imply that regulatory policy should aim to change the market structure in order to increase competition. If the efficiency hypothesis holds, then stronger measures to prevent banks' internal "soundness" have to be introduced.

5.3.2. Rationale for testing the SCP hypothesis for Eastern Europe

In Eastern Europe, analysis of the SCP relationship can provide a powerful tool for evaluating the main policy issues in banking. As there is a strong need for improvement in the performance of commercial banking markets, proper directions for regulations have to be identified. If evidence of an SCP relationship is found, then more competition should be allowed, most notably by easing foreign entry which at least poses a competitive challenge to the status quo. **Confirmation of the SCP hypothesis in Eastern Europe also means that large state-owned banks are relatively "immune" from competition due to their oligopolistic power**. Some monopolistic competition might occur, but this could be mitigated by the government acting as an owner. However, significant losses of producer surpluses can occur when new entry is allowed.

On the other hand, **if the efficiency hypothesis holds, then, apart from generally requiring a strengthening of overall bank supervision, the government may act more extensively for the benefit of state-owned banks, as their owner**. This may take place by merging state banks in order to decrease internal competition or by other efficiency-promoting means. This obviously does not mean that public money should be involved, unless it is guaranteed that it will be used for socially approved goals, for example agriculture or SME support. Thus, in banking sectors characterised by the

efficiency hypothesis, intra-industry competition is already sufficient and the state can act for the benefit of a chosen group of banks without the danger of increasing their oligopolistic position. When the efficiency hypothesis already holds, one can expect that additional foreign entry will not bring significant pro-competitive effects and thus may be, at least for that reason, undesirable. The question remains whether intensive policies pursued in such circumstances will not result in a change of the market structure to one characterised by the SCP hypothesis.

There are obvious rationales for testing the SCP hypothesis in East European banking markets. First, very little empirical work, if any at all, has been done investigating the competitive behaviour in these markets. Secondly, the SCP analysis can also give some insights into the causes of the banking crises that plagued the economies in question. Thirdly, the results of SCP analysis can help in the evaluation of government policies and in the preparation of guidelines for the future. Fourthly, if the SCP hypothesis holds, than some oligopolistic profits in the industry will probably occur. If these are significant, then producer surplus losses would be substantial when integration with the world market takes place. In such a situation a detailed cost-benefit analysis is required prior to integration.

5.3.3. Formulation of the model

According to Heggestad (1979), the SCP model makes the equilibrium price for any product or other dimension of bank performance a function of:

1. The level and elasticity of market and firm demand;
2. The firm's cost function;

3. The prices and quantities of related financial products, and their interaction with the firm's demand and cost function;
4. The objective functions of firms in the market; and
5. The interaction among firms in the market. (p.466)

Every firm (in our case, bank) would simultaneously reach the equilibrium price or other ratio indicating its performance. Market structure influences this by affecting relations between firms. In order to model this process, multiple regression analysis as a means of relating structure to performance in banking markets will be used. As Molyneux and Forbes (1995) mention, SCP paradigm studies can be divided into two groups according to the dependent variable. The model can be estimated on the basis of the price of certain banking products or by using some profitability measures. However, the first group of studies (i.e. with prices) creates problems for the researcher applying this model to banking services. Individual prices are difficult to measure and cross-subsidisation is very often in place. Moreover, in the circumstances of Eastern Europe, no detailed analysis of specific bank products is available and therefore such a approach is not feasible empirically. For these reasons, two profitability measures (ROE and ROA) will be used for estimation purposes.

The general structure of the model can be described as (see Heggestad, 1979; Molyneux and Forbes, 1995; Molyneux *at al., 1996*), in line with general profit function form presented in Chapter 2:

$$\Pi = f(M,X) \qquad (2.2)$$

and more specifically:

$$\Pi = f(CR, S, X) \qquad (5.1)$$

where:

Π - performance measure

CR - measure of market structure (usually a concentration measure)

S - measure of the size of the market or other market structure variables, such as proxies for barriers of entry

X - a vector of control variables related to firm-specific characteristic.

In practice, the SCP versus efficiency hypothesis can be tested by estimating the following equation:

$$\Pi_{ij} = a_0 + a_1 CR + a_2 S + \sum_{ai} X_i \qquad (5.2)$$

The SCP hypothesis can be confirmed if $a_1>0$ and $a_2=0$; and the efficiency hypothesis by finding that $a_1=0$ and $a_2>0$. In practice we will test this composite hypothesis simultaneously in order to reject one of them.

5.3.4. Test of SCP hypothesis for Poland and Hungary

The following equation will be used to test the competing hypotheses for the banking sectors in Hungary and Poland:

$$\Pi_i = a_0 + a_1 CR_j + a_2 MS_{ij} + a_3 LBAL_{ij} + a_4 CAPAS_{ij} \qquad (5.3)$$

where:

Π_i - bank i's profits measured as a return on equity (ROE) and return on assets (ROA)

CR_j - concentration ratio in market j (three largest banks asset concentration)

MS_{ij} - market share measure (share of assets)

$LBAL_{ij}$ - log of value of bank assets (balance sheet sum)

$CAPAS_{ij}$ - capital to asset ratio

Additionally other variables, in particular those relating to ownership structure, were tested for inclusion in the vector of control variables (X). However, they were generally insignificant and decreased the goodness of fit measured by R^2. The independent variables include both market specific and firm specific data and are similar to those used in previous studies, notably in Molyneux and Forbes (1995). Three-firm asset concentration is used to capture the market structure, and bank-specific market share is measured by the bank's asset to total assets of the sector. Two control variables are included to account for firm-specific risk (CAPAS) and possible scale effects (LBAL). We expect CAPAS to be negatively related to the two applied profit measures (ROE and ROA) as a high value of this ratio means relatively low financial leverage. On the other hand, if we assume (as shown in Chapter 1) the existence of scale effects, variable LBAL should appear with a positive sign.

The sources of data used for this estimation are the same as in Section 1.6. For **Hungary**, pooled data for the three year period 1994-1996 were used, resulting in 101 complete observations. A similar period was chosen for **Poland** with 150 observations included. Basic characteristic of both data sets is provided in Appendix 4, section A4.2 and A4.3. No estimation was made for the Czech Republic, as data were not available. However, Matousek (1997) presents results of SCP estimation for the Czech Republic based on similar methodology. His general results will subsequently be compared with the ones presented below.

The regression results are shown in Table 5.2. In both equations for Poland R^2 value is comparable to results from other SCP studies (Molyneux and Forbes, 1995; Matousek, 1997), although these studies often used a much larger statistical sample (Molyneux and Forbes - 756 to 1538 observations).

Table 5.2 The SCP and efficiency paradigm hypothesis estimation

	Poland		*Hungary*	
Profitability measure	**ROE**	**ROA**	**ROE**	**ROA**
CONST	**-1.779**** (0.47)	-0.188 (0.05)	119.2 (103.)	0.050 (0.13)
CR	**3.011*** (0.85)	**0.366**** (0.08)	-187.1 (149)	-0.259 (0.19)
MS	-1.540 (0.88)	-0.257 (0.82)	-31.6 (185)	-0.324 (0.23)
LBAL	**0.135**** (0.03)	**0.009**** (0.002)	-2.75 (6.44)	0.006 (0.008)
CAPAS	**-0.236** (0.18)	0.021 (0.02)	-34.75 (33.2)	0.037 (0.04)
R^2	*0.44*	*0.16*	*0.03*	*0.06*
N	*150*	*150*	*101*	*101*
F	***28.43****	***6.94****	*0.746*	*1.58*

Source: Author's calculations, standard errors in parentheses, significant coefficients bold-faced.
* denotes value significant at the 5% level
** denotes values significant at the 1% level

The results from Polish sample generally support the traditional SCP hypothesis. In both regressions, the concentration ratio variable (CON) is positive and statistically significant, while the market share variable (MS) yields a negative coefficient and is not statistically significant. However, the hypothesis of the market share variable coefficient equalling zero in both equations has to be rejected at the 5% level of significance when

applying a Wald test for linear restriction. Additionally, estimated equations with return on assets (ROA) measure of profitability display multicolinearity bias and therefore the result set should be treated with caution. Nevertheless, as in line with other SCP research reasoning, that confirm the significance of this hypothesis on the basis of the significance of the concentration measure coefficient, we may conclude that for Poland the SCP hypothesis holds and the competing efficiency hypothesis can be rejected. Other variables behave as expected. The coefficients on CAPAS have a negative sign reflecting the tendency of lower capital ratios to be associated with greater risk taking, especially in case of ROE as a profitability measure. Asset size (LBAL) is positive in both regressions for Poland, thus confirming the hypothesis of existing increasing return to scale features.

The results presented for Poland, as well as those given by Matousek (1997) for the Czech Republic, support the SCP hypothesis. The outcomes suggest that concentration in both these markets lowers the cost of collusion between firms (Molyneux and Forbes, 1995) and results in higher than normal profits for all market participants. Therefore, dismantling the existing structure through, among other means, by allowing further market entry reduces the level of concentration. This will directly benefit consumers or at least will transfer a part of producers' surplus to consumers. On the other hand, further concentration in each banking sector will lead to a decrease in the level of competition and result in an increase of market profits. In such a situation, the worst policy which could be applied would be a combination of bank consolidation with simultaneous entry restrictions. **In the case of Hungary the overall results are inconclusive**, due to the low R^2 and lack of significance of any variable. This may be due to the low quality and low number of observations. Additionally problems with multicolinearity appear again, as in the case of Poland.

The final conclusions from the SCP exercise for the discussion of foreign entry can be formulated in the following way: **for Poland and the Czech Republic, foreign entry is required in order to dismantle the heavily concentrated and regulated structure of the banking sector. With respect to Hungary, the results are inconclusive but taking into account development of Hungarian banking sector it can be concluded that the appropriate number of players is probably already in place.**

5. 4. Conclusions

This chapter provides an overview of the major issues related to the costs and benefits of foreign entry in the banking sector. Some quantifiable direct benefits were calculated on the available data for Poland, Hungary an the Czech Republic. Those benefits are significant, although they remain small in relation to the national economy. Other researchers and politicians have attributed a more important influence to the indirect costs and benefits of foreign entry. Although in most cases based on descriptive and quite often superficial evidence, the overall opinion is that foreign banks' entry has contributed to efficiency growth in the banking sectors in Eastern Europe, and more generally to the overall development of the economy. On the other hand, foreign banks are criticised (mostly by researchers from within the region) for their conservative and risk-averse policies and short-term profit seeking behaviour.

Foreign entry can be a useful tool in shaping the structure of the financial services market. In the case of Poland and the Czech Republic, rivalry in these markets is determined by conditions of market structure. Therefore, market conditions are more deeply influenced by the number of operating firms and the conditions of entry than by the internal efficiency of the

given banks. **By admitting foreign banks, regulators in Poland and the Czech Republic will pursue more an efficiency-oriented policy which will be more compatible with the already sound and prudent sector**. Therefore, a certain minimum degree of security should be achieved before allowing foreign access. Obviously, foreign investors themselves would not generally be interested in entering an unstable and very risky environment. Thus, the desire of these countries to introduce and maintain internationally recognised banking standards, such as minimum liquidity ratios, exposures limits etc., are fully justified and have to be completed without hesitance. However, weak domestic bank owners are often not able to maintain these standards. One solution, which has actually been applied in Hungary, is to pass these obligations on to new foreign owners, who are allowed to purchase domestic banks without restrictions. By applying this solution, the market can be pushed towards more a greater drive towards internal-efficiency without compromising prudential standards.

Final conclusions and directions for further research

This thesis has presented the set-up, conduct and an evaluation of the effects of reforms in the banking systems of three transitional East European countries, namely Hungary, the Czech Republic and Poland. Particular attention has been devoted to the entry of foreign banks, as this appears to be a leading force in shaping the structure and performance of these systems.

This study supports the main thesis that the foreign bank entry is one of the most important factors influencing the banking sectors of Eastern European countries. The characteristics and main features of foreign entry were discussed in order to support this thesis. The direct and indirect effects of this entry were analysed, as well as protectionist instruments used against foreign entry. The thesis is supported by showing the differences between the development of each banking sector, and arguing that the attitude to and allowance of foreign entry was one of the most important factors explaining these differences. However, foreign entry cannot be treated as an immediate panacea for all problems plaguing EE banking sectors, as a number of issues remains to be solved internally, and the competitive impact of foreign banks is still restricted mainly to corporate services.

In course of this dissertation, several **problems which were previously addressed only in descriptive terms are here investigated through the development and application of established empirical methodology**. In some areas, e.g. the appraisal of the implicit tax derived from the reserve requirements and the simulation of the costs effects of "consolidation programme", this is the first such disciplined attempt to quantify and model these processes in the EE banking industry. This approach sets the necessary precedent for further, advanced analysis and assessment of specific, important aspects of banking systems transformation.

However, **the methodology** applied in the course of this thesis may to a certain extent limit the importance and reliability of the findings. The low number of answers received in the survey, choice of case studies and quality of numerous data can be questioned. Although the author had a quite limited choice in this respect, it may create an impression of a lack of consistency in methodology and a limited scope for generalisation. Nevertheless, the data and methodology applied here were the best possible in the sense that no alternative data could be collected and no more appropriate methodology was available.

The way in which the research was conducted as well as the limited capacity of a single researcher does not allow the ultimate appraisal of foreign entry effects in discussed countries. This question is especially important in the context of EU enlargement, when a free access to EE countries will be granted to EU banks. Therefore, **further research** should focus on the effects of integration process for Agenda 2000 as well as "second wave" countries such as Romania, Croatia etc. Apart from addressing the issues of legislative and institutional adjustment, the real effects stemming from integration in the area of banking and financial services should be considered, for example by performing an analysis similar to the Price Waterhouse exercise, as described in section 5.1. Also, more rigorous analysis of the main factors driving foreign entry can be performed, including econometric techniques, as more data becomes available. The scarcity and lack of standardisation of the data on the banking sectors in EE countries calls for the establishment of a monitoring and data collecting centre. Such a centre can be established on the base of one of the already existing research centres or within an international organisation. By collecting regional data in a comparable format, the experiences of one particular country may be used for the benefit of other.

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Appendix 1: Estimation of production function

Poland

	1991	*1992*
const	0.147 (0.503)	0.228 (0.407)
own	0.394 (0.558)	**0.792*** (0.465)
lcap	**0.353**** (0.111)	**0.619**** (0.093)
lemp	**0.916**** (0.132)	**0.666**** (0.088
ownlcap	0.024 (0.123)	-0.088 (0.117)
ownlemp	-0.077 (0.150)	-0.020 (0.121)
N	*66*	*89*
R^2	*0.967*	*0.958*
F	*356.2*	*375.9*

Poland 1993

dummy used	own	for	non
const	**1.293*** (0.733)	**0.918**** (0.244)	**1.079*** (0.618)
dummy	**1.374** (1.890)	**-9.672**** (2.772)	**2.106**** (0.811)
lcap	**0.732**** (0.153)	**0.586**** (0.082)	**0.494**** (0.147)
lemp	**0.424**** (0.122)	**0.610**** (0.070)	**0.661**** (0.113)
dummy*lcap	-0.256 (0.297)	**1.103**** (0.343)	-0.040 (0.202)
dummy*lemp	0.079 (0.188)	**1.264**** (0.364)	-0.197 (0.147)
N	*54*	*54*	*54*
R^2	*0.902*	*0.952*	*0.936*
F	*88.7*	*192.1*	*140.8*

Poland 1994

dummy used	own	for	non
const	**0.697*** (0.382)	**1.084**** (0.261)	0.641 (0.419)
dummy	**1.228*** (0.585)	**0.451*** (0.192)	**1.189*** (0.512)
lcap	**0.728**** (0.098)	**0.505**** (0.081)	**0.595**** (0.110)
lemp	**0.516**** (0.078)	**0.661**** (0.074)	**0.636**** (0.095)
dummy*lcap	-0.187 (0.173)	0.002 (0.003)	0.026 (0.140)
dummy*lemp	0.017 (0.174)	0.001 (0.001)	-0.160 (0.122)
N	*62*	*62*	*62*
R^2	*0.935*	*0.937*	*0.944*
F	*160.4*	*166.0*	*187.0*

Poland 1995

dummy used	own	for	non
const	0.147 (0.262)	-0.267 (0.232)	-0.329 (0.283)
dummy	0.773 (1.076)	-0.078 (0.695)	**1.137** (0.442)
lcap	**0.754** (0.072)	**0.562** (0.075)	**0.562** (0.082)
lemp	**0.499** (0.058)	**0.669** (0.065)	**0.677** (0.072)
dummy*lcap	-0.258 (0.287)	0.317 (0.199)	0.152 (0.166)
dummy*lemp	0.080 (0.237)	-0.090 (0.161)	**-0.226*** (0.112)
N	*65*	*65*	*65*
R^2	*0.935*	*0.950*	*0.948*
F	*171.0*	*225.0*	*214.9*

Poland 1996

dummy used	own	for	non
const	**0.504*** (0.261)	0.376 (0.253)	0.263 (0.322)
dummy	0.697 (0.632)	0.563 (0.655)	**0.809*** (0.417)
lcap	**0.700**** (0.063)	**0.566**** (0.075)	**0.608**** (0.094)
lemp	**0.484**** (0.052)	**0.592**** (0.071)	**0.575**** (0.081)
dummy*lcap	-0.134 (0.148)	0.060 (0.201)	-0.053 (0.120)
dummy*lemp	0.018 (0.156)	-0.110 (0.128)	-0.052 (0.099)
N	*80*	*80*	*80*
R^2	*0.929*	*0.927*	*0.932*
F	*194.7*	*188.0*	*201.4*

Poland 1997

dummy used	own	for	non
const	**1.073**** (0.260)	0.215 (0.324)	-0.094 (0.483)
dummy	-0.230 (0.517)	0.902 (0.554)	**1.134*** (0.564)
lcap	**0.717**** (0.052)	**0.456**** (0.094)	**0.416**** (0.117)
lemp	**0.385**** (0.057)	**0.688**** (0.100)	**0.760**** (0.139)
dummy*lcap	-0.140 (0.200)	**0.413**** (0.155)	**0.348**** (0.144)
dummy*lemp	0.140 (0.168)	**-0.446**** (0.136)	**-0.402**** (0.152)
N	*74*	*74*	*74*
R^2	*0.932*	*0.941*	*0.938*
F	*187.4*	*218.6*	*207.3*

Hungary

	1993	*1994*	*1995*
const	1.463 (0.989)	**2.680** (0.602)	**3.331** (0.834)
for	1.519 (2.008)	**-3.190** (0.893)	-1.366 (1.253)
lcap	**0.374** (0.144)	**0.218** (0.099)	0.104 (0.065)
lemp	**0.946** (0.102)	**0.959** (0.075)	**1.104** (0.122)
forlcap	0.002 (0.319)	**0.794** (0.157)	**0.538** (0.167)
forlemp	-0.120 (0.219)	**-0.488** (0.136)	**-0.448** (0.181)
N	*32*	*34*	*35*
R^2	*0.899*	*0.964*	*0.881*
F	*46.3*	*152.0*	*43.0*

Appendix 2. Data for implicit tax calculations

A2.1. Data for Poland

Month	Reserves value	Average 28-days bonds yield	Opportunity cost
1991/12	2.115	42,3%	n.a.
1992/1	2.231,9	42,9%	75,61
2	2.320,7	43,5%	80,91
3	2.233,7	44,1%	85,29
4	2.397,9	43,7%	81,34
5	2.148,6	43,5%	86,92
6	2.165,4	43,1%	77,17
7	2.300,8	40,7%	73,44
8	2.369,1	40,4%	77,46
9	2.257,7	40,3%	79,56
10	2.317,6	39,0%	73,38
11	2.388,2	35,5%	68,56
12	2.443,4	37,2%	74,03
1993/1	2.735,1	35,9%	73,1
2	2.678,4	31,0%	70,66
3	2.644,4	25,9%	57,81
4	2.755,2	28,9%	63,69
5	2.738,9	31,2%	71,64
6	2.806,1	31,5%	71,9
7	2.786,8	31,6%	73,89
8	2.895,1	31,7%	73,62
9	2.956,3	31,8%	76,72
10	2.971,3	31,1%	76,62
11	3.011,8	31,0%	76,76
12	3.194,1	31,2%	78,31
1994/1	3.441,2	30,9%	82,25
2	3.492,3	27,7%	79,43
3	3.585,7	27,5%	80,03
4	3.567,9	28,1%	83,97
5	3.562,2	28,0%	83,25
6	3.760	27,1%	80,45
7	3.794,1	27,1%	84,91
8	3.947,1	27,0%	85,37
9	4.198,3	26,8%	88,15
10	4.614	26,9%	94,11
11	*3915,9* [1]	26,9%	*103,43* [1]
12	*3915,5* [1]	26,9%	*87,78* [1]

Source: NBP and author's calculations
All values in million PLN
[1] In November 1994 a significant part of reserves was transferred into non-interest bearing current accounts of banks within the NBP. The value of reserves for November and December 1994 has been computed as a sum of banks' current account position plus value of reserve account.

2.2. Data for Hungary

Month 1	Total reserves	Reserves on forint deposits	Reserves on foreign currency deposits	Interest on reserves on forint deposits	Interest on reserves on foreign currency deposits	Average 30-days t-bonds yield[2]	Opportunity cost	Total value of interest paid on reserves
1990/1	42,9	40,9	2	0	0	17,0%	0,61	0
2	41,6	39,2	2,4	0	0	17,0%	0,61	0
3	41,8	39	2,8	0	0	17,0%	0,59	0
4	41,8	38,6	3,2	0	0	17,0%	0,59	0
5	43,8	40,2	3,6	0	0	17,0%	0,59	0
6	45,5	40,9	4,6	0	0	19,0%	0,69	0
7	41,4	36,2	5,2	0	0	21,0%	0,8	0
8	40,1	33,7	6,4	0	0	21,0%	0,72	0
9	39,6	32,2	7,4	0	0	21,0%	0,7	0
10	44,3	33,3	11	0	0	21,5%	0,71	0
11	47,8	34,7	13,1	0	0	22,0%	0,81	0
12	65,4	50,8	14,6	0	0	22,0%	0,88	0
1991/1	66,9	48,5	18,4	15,4%	15,4%	25,0%	0,52	0,84
2	73,2	64	9,2	15,4%	15,4%	25,0%	0,54	0,86
3	97,6	90,5	7,1	15,4%	15,4%	25,0%	0,59	0,94
4	94,6	88,1	6,5	15,4%	15,4%	25,0%	0,78	1,25
5	102,5	88,4	14,1	15,4%	15,4%	25,0%	0,76	1,21
6	107,9	90,9	17	15,4%	15,4%	25,0%	0,82	1,32
7	119,6	92	27,6	15,4%	34,8%	25,0%	0,59	1,66
8	122,2	92,6	29,6	15,4%	34,8%	25,0%	0,51	1,98
9	128,9	96	32,9	15,4%	34,8%	25,0%	0,5	2,05
10	147,9	111,8	36,1	13,0%	33,0%	25,0%	0,74	1,94
11	158,4	119,7	38,7	11,0%	29,0%	25,0%	1,18	1,90
12	166,3	124,9	41,4	11,0%	29,0%	25,0%	1,27	2,03
1992/1	161,2	128,3	32,9	11,0%	29,0%	31,0%	2,15	2,15
2	175,4	144,8	30,6	11,0%	29,0%	31,0%	2,19	1,97
3	171,5	145,3	26,2	11,0%	26,0%	29,5%	2,32	1,99
4	173,2	148,9	24,3	11,0%	22,0%	27,3%	2,09	1,81
5	180,6	157,2	23,4	11,0%	22,0%	26,8%	2,06	1,81
6	186,4	163,6	22,8	9,0%	20,0%	21,1%	1,61	1,57
7	195,2	167,1	28,1	8,0%	18,0%	16,5%	1,13	1,43
8	193,4	171,5	21,9	6,0%	14,0%	15,5%	1,36	1,16
9	193,5	171,7	21,8	4,0%	13,0%	16,6%	1,87	0,81
10	195,2	174,7	20,5	3,0%	12,0%	14,8%	1,74	0,65
11	197,8	176,9	20,9	3,0%	12,0%	14,6%	1,73	0,64
12	204,1	183,3	20,8	3,0%	12,0%	14,4%	1,72	0,65
1993/1	179,1	164,1	15	2,0%	11,0%	13,8%	1,85	0,5
2	163,2	152	11,2	2,0%	11,0%	13,5%	1,6	0,41
3	160,6	146,6	14	2,0%	11,0%	12,5%	1,34	0,36
4	169	154,2	14,8	2,0%	11,0%	12,0%	1,23	0,37
5	188,7	172,7	16	2,0%	11,0%	12,3%	1,34	0,39

6	174,2	160,5	13,7	2,0%	11,0%	12,5%	1,53	0,43
7	156,3	142,6	13,7	2,0%	11,0%	15,1%	1,8	0,39
8	160,2	148,5	11,7	2,0%	11,0%	16,9%	1,84	0,36
9	146,3	137,4	8,9	2,0%	11,0%	22,5%	2,65	0,35
10	178,8	161,5	17,3	2,0%	11,0%	23,4%	2,54	0,31
11	163,2	147,8	15,4	2,0%	11,0%	23,1%	3,01	0,43
12	179,6	169,5	10,1	2,0%	11,0%	23,7%	2,84	0,39
1994/1	183,8	167,2	16,6	2,0%	11,0%	21,8%	2,89	0,38
2	163,5	153,5	10	2,0%	11,0%	21,0%	2,79	0,43
3	161,6	150,1	11,5	2,0%	18,0%	22,2%	2,62	0,41
4	171,6	154,6	17	2,0%	18,0%	23,5%	2,74	0,42
5	154	137,4	16,6	2,0%	18,0%	23,6%	2,86	0,51
6	154,3	137,2	17,1	4,0%	18,0%	24,0%	2,37	0,71
7	163	146,9	16,1	6,0%	18,0%	26,2%	2,43	0,94
8	155,2	141,5	13,7	6,0%	18,0%	29,9%	3,09	0,98
9	133	114,5	18,5	6,0%	18,0%	29,4%	2,89	0,91
10	*173,85* [3]	*151,77* [3]	*22,08* [3]	8,0%	18,0%	28,3%	2,1	1,04
11	*155,15* [3]	*135,45* [3]	*19,7* [3]	8,0%	18,0%	26,1%	2,44	1,34
12	*152.85* [3]	*133.44* [3]	*19.41* [3]	8,0%	18,0%	26,1%	2,18	1,2

Source: National Bank of Hungary and author's calculations

All values in billions forints

[1] No data for December 1989. Calculation of quasi - tax in table based on linear extrapolation.

[2] For 1990-1991 interest on NBH credit for budget.

[3] From September 1994 data approximated based on the banks' account value within NBH and previous distribution between domestic and foreign currency deposits.

Appendix 3. Postal Survey

A3.1 Questionnaire and cover letter

Following section contains cover letter and questionnaire form. Cells of form were filled by average results or number of positive answers obtained for given country and question.

London...

Sir;

In a framework of the PHARE European Union Programme, I am conducting research on foreign banks' and other firms' entry into East European countries' financial sectors. One of the most important parts of this research is a survey of investors, or future investors, on their attitudes towards investment in this region.

I am delighted to enclose the survey. When you fill it in you will be taking part in the first such a survey run among banks and financial firms that have an interest in Eastern Europe. It will only takes a few minutes, but the information provided by you will be invaluable for my research.

The survey is anonymous. The information you provide will be safeguarded and will only be used in an aggregated form.

Thank you in advance for your cooperation.

Łukasz Konopielko

If you wish not to answer for particular question, please leave it blank.

1. How would you rank the following reasons of your bank for establishing its activity in the given countries-**use ranks from 1 to 4** i.e. 1-not important at all; 2-not important; 3-important; 4-very important

	Poland	Hungary	Czech Rep.
(a) Supporting client base	3.79	3.29	3.29
(b) Supporting trade finance while lacking reliable confirming banks	3	2.85	2.69
(c) Looking for new business opportunities	3.43	3.31	3.23
(d) Meeting the competition of other banks	2.36	2.31	2.31
(e) Other: please specify			

2. How would you rank the applicability following methods of entry with respect to the given countries (1- completely not relevant, 2-rather not relevant; 3-quite relevant; 4-the best method)

	Poland	Hungary	Czech Rep.
(a) Establishing subsidiary bank	3	2.91	2.8
(b) Opening an own branch	2	2.27	2.92
(c) Taking over already existing bank	2.27	2.94	2.27
(d) Acquiring minority shares in existing bank	2.17	1.73	1.75
(e) Opening representative office	2.18	1.82	1.6
(f) Other: please specify			

3. Would you say that your EE branches are **(choose one and underline)**:

- managed mainly in place - *result: (number of positive answers) 4*
- a significant part of decisions is taken in the headquarters - *result: 5*
- branch has a decision power only with regard to day-to-day operation - *result: 2*

4. Would you say that banking sectors in given countries are **(put tick)**:

	underbranched	overbranched
Poland	7	4
Hungary	3	7
Czech Rep.	4	7

5. How would you rank in 1 to 4 (1-not important at all; 2-not important; 3-important; 4-very important)

points scale significance of the following obstacles to entry:

	Poland	Hungary	Czech Rep.
(a) Lack of transparent regulations	2.85	2.85	2.85
(b) Lack of political stability	2.31	2.23	2.23
(c) Lack of economic stability	2.31	2.38	2.15
(d) High level of taxation and social contribution	2.46	2.58	2.81
(e) Lack of a proper staff	2.77	2.58	2.81
(f) High licence requirements	2.58	2.33	2.42
(g) Underdevelopment of infrastructure (i.e. telecommunication, office space etc.)	2.54	2.42	2.42
(h) Other: please specify			

6. Rank in 1 to 4 points scale (1-not important at all; 2-not important; 3-important; 4-very important) significance of the following areas of your banking activities in Eastern Europe:

	Poland	Hungary	Czech Rep.
(a) Trade finance	3.29	3.07	2.93
(b) Non-finance activities such as consulting	2.46	2.31	2.38
(c) Project financing	2.93	3	3.07
(d) Corporate financing	3.57	3.64	3.64
(e) Underwriting and dealing in securities	2.5	2.5	2.43
(f) Retail activities	1.93	2	1.93
(g) Trading and dealing on exchange market	3.43	3.11	3.11
(h) Leasing	2.07	2.15	2.29
(i) other: please specify			

7. (a) Do you expect profit contribution of your EE branches to increase within the next five years?

Poland : yes - not *result: (number of yes-no): 12-0*

Hungary: yes - not *result: 10-1*

Czech Rep. yes - not *result: 12-0*

(b) When (provide expected number of years) do you expect return on your investment in the given countries:

Poland : 3.12 Hungary: 2.5 Czech Republic: 3

8. How would you rank in 1 to 4 (1 - not existing, 2 - negligible, 3 - not negligible, 4 - serious threat) scale the following in terms of seriousness of threat to your Eastern European activities:

	Poland	Hungary	Czech Rep.
(a) credit losses	2.5	2.14	2.14
(b) competition from the domestic banks	2.71	2.54	2.75
(c) rising expense levels	3.07	3.11	3.18
(d) shortage of trained people	2.79	2.85	2.92
(e) discrimination by national authorities	1.79	1.85	1.71
(f) possibility of political or economical crisis	2.21	2.29	2.25
(g) other - please specify			

Thanks for your cooperation. Please return questionnaire to:

Graduate Studies Office (Re: QU)
School of Slavonic and East European Studies, University of London
Senate House, Malet Street
London WC1E 7HU
Great Britain

Although the questionnaire is anonymous, if you would like to receive a copy of final results please provide your data:

Name:

Position:

Organisation:

A3.2. List of questioned banks (by country)

Austria (5)

Bank Austria

Creditanstalt - Bankverein

GiroCredit

Osterrechische Postparkasse

RZB- Austria

Belgium (3)

Banque Bruxelles Lambert

Generale Bank

Krediet Bank

Dennmark (1)

Unibank

Finland (2)

Merita Bank

Union Bank of Finland

France (13)

Banque Indosuez

Banque Nationale Paris

Banque Paribas

Caisse Centrale de Credit Cooperatif

Caisse Centrale des Banques Populaires

Credit Agricole

Credit Commercial de France

Credit Industriel d'Alsace et Lorraine

Credit Lyonais

Credit Mutuel

Eurobank

Societe Generale

Union Europeene de CIC

Germany (18)

Bayerische Landesbank

Berliner Bank

Berliner Handels-und Franfurte Bank

Commerzbank

Deutsche Bank

DG Bank

DGZ Bank

Dresdner Bank

Hypo-Bank

KfB Bank

Landesbank Berlin

Landesbank Hessen-Thuringen

Norddeutsche Landesbank

Oberbank

SGZ Bank

Westdeutsche Landesbank

Vereinsbank

Italy (6)

Banca Commerciale Italiana

Banca Nazionale del Lavoro

Cariplo

Istituto Bancario San Paolo di Torino

Istituto Mobiliare Italiano

Monte dei Paschi di Sienna

Japan (3)

Daiwa Bank

Sakura Bank

Sanwa Bank

Korea (2)

Daewoo Corporation

Lucky Goldstar

Netherlands (3)

ABN-AMRO Bank

ING Bank

Rabobank

Norway (1)

Den Norske Bank

Sweden (1)

Skandinaviska Ensklida

Switzerland (4)

Banque SCS Alliance

Credit Suisse

Swiss Bank Corporation

Union Bank of Switzerland

UK (3)

Barclays Bank

Midland Bank

Nomura International

USA (5)

American Express Bank

Bank of America

Citibank

Chase Manhattan, GE Credit Corporation

Appendix 4: Data characteristic

A4.1. Data for total cost function estimation

Sample size : 65

Variable(s)	BAL	CRE	AVWAG	AVDEP	TC
Maximum	27867.6	8160.3	.063	.701	4105.6
Minimum	18.2	.014	.014	.24	1.3
Mean	1994.8	641.8	.021	.42	228.3
Std. Deviation	4584.4	1337.8	.017	1.3	566.4

Estimated Correlation Matrix of Variables

	LBAL	LCRE	LAVWAG	LAVDEP
LBAL	1	.876	-.022	-.120
LCRE	.876	1	-.137	-.280
LAVWAG	-.022	-.137	1	-.088
LAVDEP	-.120	-.280	-.088	1

A4.2. Data for SCP estimation - Hungary

Sample size : 101

Variable(s)	ROE	ROA	CR	MS	BAL	CAPAS
Maximum	2.11	.344	.464	.337	830958	.961
Minimum	-18.7	-.296	.369	.0002	623	.0002
Mean	0.507	.008	.414	.023	66904	.244
Std. Deviation	2.93	.069	.038	.042	114531	.250

Estimated Correlation Matrix of Variables

	CR	MS	LBAL	CAPAS
CR	1	.121	-.088	-.0007
MS	.121	1	.663	-.337
LBAL	-.088	.663	1	-.716
CAPAS	-.0007	-.337	-.716	1

A4.3. Data for SCP estimation - Poland

Sample size : 150

Variable(s)	ROA	ROE	CR	MS	CAPAS	BAL
Maximum	.117	1.62	.446	.214	.901	36540.1
Minimum	-.046	-.243	.404	.0001	.018	18.2
Mean	.031	.360	.439	.019	.155	2683.4
Std. Deviation	.026	.320	.026	.038	.153	5290.5

Estimated Correlation Matrix of Variables

	CR	MS	LBAL	CAPAS
CR	1	.005	-.232	.001
MS	.005	1	.722	-.312
LBAL	-.232	.722	1	-.633
CAPAS	.001	-.312	-.633	1

Appendix 5. List of institutions from which representatives were interviewed

Hungary:

National Bank of Hungary

Ministry of Finance

Hungarian Banking and Capital Market Supervision

Hungarian Banking Association

MKB Bank

MHB Bank

Inter-Europa Bank

General Banking Trust

State Property Agency

Budapest Economic University

K&H Bank

Central European University

World Bank Mission

Czech Republic:

Czech National Bank

Czech Banking Association

Agrobanka

ING Bank (branch in Prague)

Union Banka

Patria Finance

WoodCommerc

Ministry of Labour and Social Policy

Czech Institute of Applied Economics

CERGE

Office of Polish Commercial Advisor