Buch, Claudia M.

Working Paper — Digitized Version

Opening up for foreign banks: Why Central and Eastern Europe can benefit

Kiel Working Paper, No. 763

Provided in Cooperation with:
Kiel Institute for the World Economy (IfW)

Suggested Citation: Buch, Claudia M. (1996) : Opening up for foreign banks: Why Central and Eastern Europe can benefit, Kiel Working Paper, No. 763, Institut für Weltwirtschaft (IfW), Kiel

This Version is available at:
http://hdl.handle.net/10419/47113

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
Kieler Arbeitspapiere
Kiel Working Papers

Kiel Working Paper No. 763

Opening up for Foreign Banks
– Why Central and Eastern Europe Can Benefit –

by
Claudia M. Buch

August 1996

Institut für Weltwirtschaft an der Universität Kiel
The Kiel Institute of World Economics

ISSN 0342 - 0787
Kiel Institute of World Economics
Düsternbrooker Weg 120, D-24105 Kiel

Kiel Working Paper No. 763

Opening up for Foreign Banks
- Why Central and Eastern Europe Can Benefit -

by
Claudia M. Buch

August 1996

The authors themselves, not the Kiel Institute of World Economics, are responsible for the contents and distribution of Kiel Working Papers. Since the series involves manuscripts in a preliminary form, interested readers are requested to direct criticisms and suggestions directly to the authors and to clear any quotations with them.
Table of Contents

I. MOTIVATION .................................................................................................................. 3

II. THEORETICAL FRAMEWORK ......................................................................................... 4
   1. Non-Performing Loans and Market Entry .................................................................. 5
   2. Welfare Implications of Foreign Banking ................................................................. 9

III. LEGAL FRAMEWORK .................................................................................................. 14
   1. Direct Investment in Banking .................................................................................... 14
   2. Capital Account Liberalization ............................................................................... 17
   3. Association and Accession to the European Union ................................................. 18

IV. FOREIGN BANKING IN TRANSITION ECONOMIES .................................................. 20
   1. Determinants of FDI in Banking ............................................................................. 20
   2. Market Shares ........................................................................................................... 21
   4. Profitability ............................................................................................................. 24

V. CONCLUSIONS ............................................................................................................. 25
   Appendix ....................................................................................................................... 27

JEL Classification Codes: G2, P21.
Keywords: banking reform, transition economies, foreign direct investment in banking.
I. MOTIVATION

Banking reform in transition economies has thus far been a gradual process. Although most major reform elements have finally been implemented in a number of countries, gradualism has caused inefficiencies and continued misallocations of resources in the years since the onset of reforms. Reform deficiencies are a result of both a misperception of the need for structural reforms in banking and an overload of policy makers with other important reforms. Improvements in the efficiency of financial markets may in particular have been sacrificed because direct and indirect barriers to the market entry of foreign banks were erected. In order to shield the incumbent, undercapitalized domestic banks from competition from abroad, licenses to foreign banks were typically granted in a discretionary, piecemeal fashion. Although the more advanced reform states of Central Europe have certainly been more liberal in this regard than some of their counterparts in the successor states of the former Soviet Union, reservations concerning the market entry of foreign financial institutions have prevailed throughout the region. In addition to entry barriers for foreign banks, capital flows have only gradually been liberalized, and capital exports typically remain subject to a number of restrictions.

In view of their intention to join the European Union (EU) within the foreseeable future, at least those states which have already signed Association Agreements\(^1\) will have to revise their current policies towards foreign banks originating from EU countries. Such revisions will be necessary in order to comply with the principles of home country control, mutual recognition, and minimum harmonization that are enshrined in the Second Banking Directive of the EU. In fact, most of these countries have already stated their intention to assign a greater role to foreign banks during the privatization of domestic banks, and to relax their licensing policies. It may thus appear that the present paper is merely following the facts. Yet, there are many countries which have thus far been fairly hostile to the market entry of foreign banks, and even in the more advanced countries has the issue not yet been settled fully.

Against this background, this paper intends to serve three goals. First, it will give the theoretical rationale for the argument that the market access of

---

\(^1\) These are the Czech Republic, Hungary, Poland, and Slovakia, the Baltic countries (Estonia, Latvia, Lithuania), Bulgaria, Romania, and recently also Slovenia.
foreign banks can be beneficial to transition economies (Part II). Second, it reviews the current policies of four reform countries – the Czech Republic, Estonia, Hungary, and Poland – vis-à-vis foreign banks and with regard to capital account transactions, and it contrasts these regulations to the rules applying in the EU (Part III). Third, the empirical evidence on the activities of foreign banks in transition economies is presented (Part IV). Part V concludes.

II. THEORETICAL FRAMEWORK

The optimal sequence of internal and external financial liberalization has been widely discussed in the context of reforms in developing countries (Cho/Khatkhate, 1989; Gelb/Sagari, 1990; Mathieson, 1980; Reisen/Fischer, 1993). In contrast to these economies, internal financial liberalization in transition economies implies, first of all, to abolish the monobank and to replace it by a two-tier banking system. In addition, financial liberalization denotes the lifting of administrative controls on the activities of commercial banks, i.e., the abolition of interest rate and credit controls as well as the termination of subsidized lending programs. External financial liberalization is defined as the opening of the capital account for both capital imports and exports. It includes the abolition of foreign exchange controls, of restrictions on the activities of domestic and foreign banks, and of restrictions to borrowing from and to depositing abroad.

With regard to the optimal sequence of financial liberalization, most authors suggest that the capital account of the balance of payments should only be liberalized after the domestic financial system has been deregulated, and that the opening of markets for foreign competition in financial services should proceed only gradually. In fact, just as foreign direct investment (FDI) in the nonfinancial sector can be immiserizing if domestic prices are distorted (Edwards/van Wijnbergen, 1987), FDI in banking may be detrimental to economic growth if the domestic banking system is highly regulated or even financially repressed. And even if domestic financial markets have been liberalized formally, inherited institutional structures will de facto determine the structure of a financial system for a certain amount of time. Only a few authors perceive the benefits of capital account liberalization to outweigh its costs. Lal (1987), for example, proposes to liberalize the capital account in parallel to the removal of restrictions on the trade in goods in order to remove distortions in the domestic financial markets. Similarly, Walter (1985) favors the national treatment
in trade with financial services because *there is not greater justification for protection (appropriately defined) in financial services than in steel, automobiles or telecommunications equipment* (p. 117).

In discussing the optimal sequence between internal and external financial liberalization, this paper will mainly focus on the market access of foreign banks and thus on FDI in banking. Obviously, competitive pressure on domestic financial institutions can also come through various items of the capital account. Borrowing of domestic firms and households from abroad and the possibility to hold financial wealth in deposits abroad link domestic and foreign interest rates. Due to transactions costs involved in cross-border financial flows, however, competitive pressure is relatively indirect if only the capital account has been liberalized.

This section starts by framing the argument for internal-before-external financial liberalization in a simple model of the banking firm. Yet, the simple static framework leaves important dynamic aspects out of consideration. It is thus also shown that the market entry of foreign banks can be beneficial to the economy as a whole because the efficiency of the banking system is enhanced, because technology and know-how in banking are improved, and because firms and banks can access the international capital market. In addition, bankruptcies of domestic financial institutions are not inevitably a by-product of liberalization if domestic banks can exploit their comparative advantages in the provision of financial services.

1. **Non-Performing Loans and Market Entry**

Domestic banks in transition economies have to struggle with a vast array of operational inefficiencies and with low-quality assets. The banks have inherited non-performing loans from the former regime of central planning, and they lack both experienced personnel and reliable sources of information on enterprise performance needed to perform a reliable credit assessment. Many banks have therefore granted substantial amounts of non-performing loans even in the post-reform period. While cross-country comparisons of the scale of non-performing loans are complicated by different accounting standards, loan write-off regulations, provisioning requirements, and the actual level of reserves, a gradual downward trend of classified loans as a percentage of the total loan portfolio of commercial banks can be observed. Still, non-performing loans in
transition economies are generally higher than in developed market economies. In mid-1995, Hungarian banks reported 19.9 percent of their loans as being classified. At the end of 1995, Polish commercial banks had 21.7 percent of their loans classified as overdue, and this share reached even 35.4 percent in the Czech Republic in May 1996. Only Estonian banks have been able to hold classified loans at a level of 2.9 percent (April 1996) which is exceptionally low compared to other transition economies. \(^2\) Note, however, that substantial amounts of non-performing loans had been written off after the Estonia banking crisis of 1992/93.

In the presence of non-performing assets, banks are in the need to earn sufficiently high interest rate spreads on the profitable part of their operations in order to offset past losses and to maintain their operations (Buch, 1996). This mechanism is the main rationale behind suggestions to postpone external financial liberalization until internal financial liberalization has taken place, and until domestic banks have recapitalized themselves through current profits.

This argument can be made more clear in a simple formal model in which bank \(i\) competes in a market with \(n\) other banks. I consider a situation in which the domestic banking sector has been liberalized already, i.e., banks can determine their interest rates and the volume of their activities. The fact that the financial system has formerly been repressed is captured through a variable which represents the stock of bad debt that a bank carries forward as a loss from the previous period \(s_i = -\pi_{i,-1}, >0\). \(^3\) Generally, a bank carries a loss forward if, in the previous period, the bank's lending activities yielded a return which was insufficient to cover costs, and if the equity base was too small to absorb these losses. Such constellation is, of course, only conceivable if the institutional framework allows the bank to stay in business despite its negative equity. The government could, for example, temporarily guarantee the liabilities of the banks, and the legal declaration of insolvency can be postponed. Because such a deferment of liabilities cannot continue permanently, the banks must realize a non-negative profit in the present period.

\(^2\) These data were taken from CNBb (May 1996), Eesti Pank b (No. 3, 1996), MoF/ NBH (1995), and Olechowska (1996).

\(^3\) See Buch (1996) for a detailed description of this variable. Modeling the stock of bad debt as assets which carry an interest rate which has been fixed below the market interest rate instead would not change the qualitative nature of the results.
Banks invest their deposits (D) into loans (L) only. Under Cournot-type competition, bank $i$ maximizes its profit ($\Pi_i$) under the assumption that the loan supply and the deposit demand of all other banks $j$ are given

$$\Pi_i(L_i, D_i | L_j, D_j) = r^L L_i - r^D D_i - K_i(D_i, L_i) - S_i$$

where $i \neq j$; $i, j = 1,...,n$. The bank receives a return on lending ($r^L$) which is identical to the market rate of interest. The bank's costs consist of the interest payments on its deposits ($r^D$) and on operating costs ($K_i$). The loss which has been carried forward from the previous period enters the profit equation as a fixed cost. Without changing the qualitative results of the analysis, the deposit rate will be considered as exogenous to the banks ($r^D = \bar{r}^D$). Because banks hold only loans and deposits, the expected profit can be written as a function of the loan volume

$$\Pi_i(L_i) = r^L (L) L_i - r^D L_i - K_i(L_i) - S_i$$

The bank thus maximizes its profit by determining the optimal supply of loans, as given by the first order conditions for a profit maximum

$$\frac{\partial \Pi_i}{\partial L_i} = \frac{\partial r^L}{\partial L} L_i + r^L - r^D - K_i L_i = 0$$

Assuming that all banks are identical, aggregating (2) over all $n$ banking firms, and solving for $r^L$ reveals that the oligopoly price for loans is set at a margin above marginal costs. The size of this margin depends upon the interest rate elasticity of loan demand $\epsilon(L, r^L)$ and on the number of competitors. This gives a modified version of the Amoroso-Robinson pricing rule

---

4 The basic model has been taken from Baltensperger and Milde (1987). For simplicity, $D_j$ and $L_j$ is used as a shorthand for $\sum_{j \neq i} D_j$ and $\sum_{j \neq i} L_j$. See Selten (1980) for a general description of the oligopolistic market structure.

5 Operating costs are increasing in $D$ and $L$ ($K_D, K_L > 0$). The second order conditions for a profit maximum are derived in Buch (1996).
As the number of the competitors rises, the equilibrium loan rate converges to the bank's marginal costs. The market entry of new banks therefore puts pressure on interest rate spreads. Allowing for an impact of the number competitors also on the deposit rate, this effect would be positive, i.e., the deposit rate would tend to rise in response to an increase in \( n \). Competition may thus drive the expected return from lending below total average costs. This gives an explanation for the reluctance of the regulatory authorities to let new banks enter the market if the incumbent banks have a stock of bad debt on their balance sheet. Because new domestic or foreign banks do not have to cover past losses out of current profits, market entry would threaten the viability of the incumbent banks.

The main concern against the market entry of foreign banks stems from the fact that they not only have a balance sheet which is clear from non-performing loans but that they also have lower operating costs than domestic banks. Hence, their presence in the market may be even more detrimental to the incumbent banks than the emergence of new domestic financial institutions.

The effects of different cost structures can more explicitly be shown in a duopoly-model \( (n=2) \). Assuming a linear market demand for loans, the equilibrium on the loan market is given by

\[
\sum_{i=1}^{n} L_i = L_1 + L_2 = L(r^L) = a - b r^L \quad \Rightarrow \quad r^L(L) = \frac{L_1 + L_2 - a}{b}
\]

By using (4), the first order condition for a profit maximum of bank 1 becomes

\[
\frac{\partial r^L}{\partial n} = \left[ K_{i;L} + r^D \right] \frac{\epsilon(L, r^L)}{\left[ 1 + n \epsilon(L, r^L) \right]^2} < 0
\]

By using \( \frac{\partial r^L}{\partial n} = 0 \). By using the implicit functional form \( F(r^L, n) = 0 \) and the rule \( \frac{\partial r^L}{\partial n} = -\frac{\partial F}{\partial n} - \frac{\partial F}{\partial r^L} < 0 \) (Chiang, 1984, p. 208), it can be shown that relaxing this assumption would not change the qualitative results of the analysis.

\[ r^L = \frac{K_{i;L} + r^D}{1 + \frac{1}{n \epsilon(L, r^L)}} \quad \epsilon(L, r^L) < 0 \land \epsilon(L, r^L) < -\frac{1}{n} \]

(3)
Transforming (2') gives the optimal loan supply of bank i at a given loan supply of bank j

\[ L_i^* (L_j) = \frac{b}{2} \left( K_{i,L} + r^D - \frac{a}{b} + \frac{L_j}{b} \right) \]

The optimal loan supply and deposit demand of each bank are determined by the intersection of the reaction functions in (5)

\[ L_i^* (L_j^*) = \frac{1}{3} b \left( K_{j,L} - r^D + \frac{a}{b} + \frac{L_j^*}{b} \right) - \frac{2}{3} b K_{i,L} \]

Loan supply of bank 1 thus expands if the marginal costs of bank 2 rise and decreases if its own costs increase, albeit with different intensities (and vice versa). Changes in the relative cost structures of the banks thus affect market shares. The market share of bank 1 on the loan market \((MS_1)\), for example, decreases if its marginal operating costs increase relative to that of its competitor

\[ MS_1 = \frac{L_i}{L^*} = \frac{L_i^*}{L_1 + L_2} \Rightarrow \frac{\partial MS_1}{\partial K_{i,L} \mid \delta K_{i,L} = 0} = \frac{1}{3} b \left( \frac{L_i^*}{L^*} - 2 \right) = -\frac{1}{3} b \left( 1 + \frac{L_2^*}{L^*} \right) < 0 \]

The effect of an increase (decrease) in marginal costs relative to the bank's competitor is therefore a loss (gain) in market share and in profits. The market entry of foreign banks thus tends to force existing banks out of the market, and it hinders the market entry of new domestic banks.

2. Welfare Implications of Foreign Banking

The main argument against an early market entry of foreign banks is the risk that domestic financial institutions cannot withstand increased competitive pressure and would go bankrupt. In addition to bank bankruptcies during which (uninsured) depositors would lose their savings, banking failures might have
spill-over effects on other banks, and information capital would be destroyed. Hence, a government which assigns a high weight to domestic banks' profits would decide to postpone external financial liberalization until the efficiency of domestic banking has improved.

Yet, the welfare costs of the market entry of foreign banks must be weighted against the welfare gains which arise from a more liberal regime. Generally, the case for international trade in financial services can be made in an analogy to international trade in goods. Because the production of financial services is rather human capital intensive, countries which have a relative rich supply of skilled labor are likely to export financial services. Employing the principle of national treatment implies free trade in financial services and allows countries to exploit their comparative advantages in the production of these services. The analogy between trade in goods and in financial services is not complete, however. While trade in goods and factor movements can be viewed as close substitutes, the provision of financial services abroad is quite tightly linked to the actual presence of the financial intermediary in the foreign country (Walter, 1985). Because the provision of financial services is largely based on informational advantages that an intermediary has, personal contacts to customers are needed. Even though the need for a bank to be physically present in the market abroad diminishes as new communication technologies are developed, entry restrictions for foreign financial institutions remain quite effective in protecting the domestic financial sector from foreign competition. Capital account liberalization and FDI in banking are thus imperfect substitutes.

A number of factors have been discussed in the literature which determine comparative advantages of international financial institutions (Goldberg/Johnson, 1990; Grubel, 1977; Walter, 1985). Because one main reason for the existence of banks is their ability to process information more efficiently than other institutions, experience, prior customer relations, and human resource endowments are driving forces behind the international expansion of banks. In addition, the regulatory environment of a host country, and – to a lesser extent – diversification effects of international investments are important determinants of FDI in banking. The importance of existing customer relations implies that trade in goods and FDI in banking may be complements. The di-

7 In addition, the fear of foreign control in the banking industry and the eventual loss of monetary control can be voiced against the market entry of foreign banks. See Grubel (1977) and Wachtel (1995) for an overview.
rection of causality is thus not clear. While banks may merely be following their customers into foreign countries, they may as well be present in foreign markets prior to their corporate clients and provide information about the new market. Analyzing historical data, Kindleberger (1983) finds no convincing evidence for the hypothesis that banks merely follow their clients. Accordingly, the presence of foreign banks can be one determinant of the attractiveness of a host country for FDI in the nonfinancial sector.

Studies on the international activities of US banks shed some light on the empirical relevance of different determinants of FDI in banking. Goldberg and Johnson (1990) explain the total assets of foreign bank branches and the total number of branches, respectively, by various independent variables. They show that FDI in banking is positively related to a favorable regulatory regime towards foreign banks, and to the size of the host country's population as a proxy for the volume of business. The foreign activities of domestic nonfinancial firms are measured by the volume of FDI in the nonfinancial sector. It turns out that large banks are more prone to follow their clients than smaller banks. The importance of FDI by nonfinancial firms in the host country for FDI in banking is more clearly borne out in a study by Sagari (1992). She analyzes the determinants of FDI of banks from the United States in 21 developed and developing countries in the year 1977. The only variable which has a clearly significant, positive impact on banks' international expansion is the investment of US-firms in the host country's non-banking industry. Favorable regulations and the host country's market size positively affect FDI in banking, albeit at a lower significance level, while a clear link to the competitiveness of the domestic banking industry could not be established. Sagari concludes that foreign banks have the potential to break up an oligopolistic domestic market structure, but that their impact on competition is limited by their focus on relatively small market niches.

Viewing FDI in banking as reflecting comparative advantage reveals a major shortcoming of the above model which does not allow for a differentiation between banking products. Because only one class of loans is produced, absolute cost advantages matter. In reality, however, banking products are much more diverse. Even though domestic banks may have higher operating costs and provisioning needs in absolute terms as compared to foreign banks, they may yet be able to exploit comparative advantages in the provision of some financial services. Even if unrestricted market access of foreign banks is possible, these banks may choose not to enter into the traditional business of domestic banks
but rather to restrict themselves to relatively small market segments. Export trade financing, investment banking, and some areas of wholesale banking are the fields where foreign banks are most likely to be active.

Apart from the utilization of comparative advantages in producing financial services, FDI in banking can also contribute to a transfer of know-how into the domestic banking system and in improving its efficiency. This can directly be achieved through the acquisition of ownership stakes or through the forming of twinning arrangements with domestic banks. These links could actually assist the domestic banks in better utilizing their information capital and provide the users of financial services with superior inputs. Hence, substantial gains from higher quality intermediation can be realized. In addition, foreign banks can improve the corporate governance of domestic banks if they acquire stakes in the privatized banks.

An argument which is often voiced against the market entry of foreign banks is the fear that foreign banks pick only the "best" clients, leaving the domestic banking sector with a pool of low-return, high-risk enterprises. Yet, this argument does not justify to shield the transition economies from competition in financial services for two reasons.

First, ex ante and ex post knowledge about the quality of loan customers must be distinguished. *Ex ante* asymmetries in information are one main rationale for the existence of financial intermediaries in general and of banks in particular. Because the quality of prospective borrowers can typically not be assessed with certainty prior to the writing of a loan contract, screening and sorting mechanisms need to be designed which help to overcome informational asymmetries. The fact that foreign banks tend to operate with clients which *ex post* are revealed to have an above average profitability simply implies that these banks have developed better risk assessment techniques than the domestic banks. These abilities cannot be utilized if markets are protected, and credit rationing may result (Stiglitz/Weiss, 1981).

Second, the fact that foreign banks in many cases merely follow their clients abroad and thus expand their home country business suggests that this type of business may not be available to the domestic banks. Foreign banks make use of the specific customer relationship that they have build up which cannot easily be replicated by a domestic bank. The relevant alternative to the presence of
foreign banks abroad may thus be that they service their customers through the foreign bank’s home country headquarters.

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. Postponing external financial liberalization shields domestic banks which have not yet been recapitalized from the loss of market shares and prevents information capital from being destroyed. If the problem of inherited non-performing assets has been dealt with through the recapitalization of banks, however, the case for a protectionist regime vis-à-vis foreign banks is substantially weakened. Hence, postponing the market entry of foreign banks in the presence of bad loans is likely to be the wrong strategies for the transition economies. A superior strategy would be to relieve domestic banks from their burden of inherited bad loans early on through recapitalization.

Dealing with non-performing loans, however, is less straightforward than the simple theoretical analysis implies. While banks can be recapitalized for their stock of inherited bad loans, the volume of new bad loans is – by definition – endogenous to the structure of a country’s banking system. In order to arrive at a comprehensive solution, incentive and control structures of banks must be substantially modified in order to prevent new bad loans from emerging. This is in fact the most complicated task. When determining the optimal sequence of reforms, policy makers must be aware of the fact that foreign banks can play an important role in the needed privatization of domestic banks, in improving corporate governance mechanisms for banks, and in creating a competitive climate which is conducive to enhanced efficiency in banking.

---

8 Of course, this sequence can not always be obeyed because recapitalization may have been procrastinated already. Buch (1996) discusses options how to deal with bad debt in such cases.
III. LEGAL FRAMEWORK

The legal framework for the activities of foreign banks in the countries under review is currently shaped by the banking laws and foreign exchange regulations that have been adopted since the onset of reforms. In addition, the regulations of the EU for association and accession to the Union constrain the legislative choices of the transition economies. Notwithstanding the still incomplete market access in the area of financial services, the transition economies have already made substantial progress in comparison to the pre-reform period. In 1979, for example, former Czechoslovakia was virtually closed for foreign banks, allowing not even representative office to be established. Poland and the former Soviet Union restricted foreign banking to representative offices. Hungary had the most liberal regimes towards foreign banks. It only prohibited foreign bank branches and foreign investment in domestic banks while generally allowing subsidiaries of foreign banks to be opened (Walter, 1985, pp. 54).

1. Direct Investment in Banking

All the countries under review have in principal lifted the barriers to the market entry of new domestic and foreign banks with the establishment of two-tier banking systems at the beginning of the reform process. Yet, FDI in banking has not yet been fully liberalized, foreign banks can in principle be treated differently from domestic banks, and both domestic and foreign banks have at times been affected by moratoria on new banking licenses.

Generally, foreign bank representation can take a number of institutional forms which have a different impact on the competitive position and on the activities of the foreign banks (Büschgen, 1991; Heinkel/Levi, 1992). Representative offices of foreign banks do not perform independent banking activities, they rather attract and arrange business for their parent company abroad. Often, representative offices of foreign banks also negotiate correspondent relationships with domestic banks. In contrast to representative offices, branches of foreign banks engage in regular banking activities but are not legally independent from their headquarters. Accordingly, decision making is not fully delegated to the foreign branch, and the activities of branches are backed by the capital of

---

9 This section is based on Eesti Pank (1994), von Furstenberg/Höfer (1996), Kostro (1992), and SBS (1994b).
the mother company. Foreign bank branches are subject to the banking supervision of both the home and the host country. Subsidiaries of foreign banks, finally, are legally independent from their parent company and must back their activities by their own capital. Hence, foreign banks need to invest more capital abroad if they want to facilitate the same level of lending activity through a subsidiary rather than a branch.

In the *Czech Republic*, foreign banks have been allowed to establish subsidiaries and to buy stakes in domestic banks since 1990. However, branches can only be opened since the beginning of 1992. A permission of the Czech National Bank is needed for the acquisition of a domestic banks (CNB, 1995). Yet, after the Czech banking sector experienced instabilities during late 1993 and in the first months of 1994, the issuance of new licenses for domestic as well as for foreign banks was stopped in mid-1994. Even during this period, foreign banks could acquire stakes in existing domestic banks. Reportedly, however, demand has been fairly low. The Czech National Bank has generally stated that it "prefers foreign or domestic capital to enter existing banks rather than grant new licenses" (CNBa, 12/1994). As of March 1996, 8-9 requests for licenses of foreign banks were pending, two of which were granted in May 1996. Future market access of foreign banks will likely remain regulated with 1-2 licenses per year to be granted (NZZ, 1996).

Also in *Poland*, the National Bank prefers to limit the market entry of foreign banks to participation in the privatization of Polish banks and in troubled domestic banks. Cooperation in the banking sector has also been promoted through twinning agreements between domestic and foreign banks. In 1993, Poland implemented a program which intended to solve the problem of inherited bad loans and to promote enterprise restructuring (Pawlowicz, 1995). Under the program, the nine regional commercial banks which had been carved out of the monobank in 1989 had to found loan work-out departments. At the same time, the banks were recapitalized for parts of their bad loan portfolios. With the technical assistance of foreign partner banks, the work-out departments had to develop and to implement restructuring strategies for their corporate clients. Reportedly, these twinning agreements have been fairly successful in improving banking skills. Ownership involvement of the foreign partners in the domestic banks, however, could not be promoted quite as much as had been envisaged.

Generally, foreign banking activities in Poland can take the form of the purchase of equity in an existing institution, the establishment of a new bank,
the establishment of a branch, or of a representative office. If a foreign bank wants to establish a branch or a new bank in Poland, approval of the President of the National Bank after consultation with the Ministry of Finance is required (von Furstenberg/Höfer, 1996; Bury et al., 1995). The nomination of the chief executive officer of the bank also requires consultation with the National Bank, and the minimum capital of the foreign bank must be ECU 5 million. Upon granting a license, the maximum amount of profits which can be repatriated without an exchange permit is determined. Founding a representative office, which activities are restricted to advisory functions, requires a permit from the president of the National Bank. Licensing has been quite liberal between 1990 and 1992. Foreign banks initially even enjoyed tax advantages during the first years of their operations, and they could keep part of their capital in foreign currency (Wachtel, 1995). Between early 1992 and late 1994, however, the market entry for foreign banks has been restricted. Despite several applications pending, no new licenses to foreign banks were issued by the Polish National Bank during this time (PlanEcon, 1995).

In Hungary, the market entry of foreign banks has been liberalized in 1987. An approval of the government is needed if foreigners wish to open a fully or partially foreign-owned bank, or if they wish to acquire stakes in an existing domestic bank (SBS, 1994b). No approval is needed if these stakes are less than 10 percent of the capital of the domestic bank. The approval of a license application depends on a number of quantitative and qualitative factors. Apart from meeting minimum capital requirements and having met certain performance criteria in the past 5 years, the business reputation of its founder(s), the familiarity of the founder with the Hungarian banking community, the impact of the foreign bank on the competitive situation of the Hungarian banking sector, and the treatment of Hungarian banks in the foreign bank's home country are considered during the licensing procedure. Licensing requests are dealt with by the State Banking Supervision, which in the case of Hungary is organized as an independent state agency, upon consultation with the Hungarian National Bank.

Estonia is the only country in the sample which in its banking law explicitly assigns a role to the cooperation with foreign banking supervisors (Eesti Pank, 1994). If a foreign bank wants to establish a subsidiary or branch in Estonia, it must submit an application containing information about the bank to the Bank of Estonia through its home country banking supervision. This application must be supplemented by a statement of the home country's banking su-
pervision concerning the bank’s capital, liquidity, and access to a deposit insurance scheme. Based on this information, the Bank of Estonia issues licenses to foreign banks. In a similar vein, the Bank of Estonia forwards information on an Estonian bank which wishes to establish a branch abroad to the host country’s banking supervision. The Bank of Estonia may also refuse the permission to go abroad. Estonian and foreign banks have been equally affected by a moratorium on banking licenses which had been put into place after the banking crisis of 1992 between April 1993 and the beginning of 1994.

2. Capital Account Liberalization

In contrast to fairly broad efforts to establish current account convertibility, capital account convertibility remains restricted in all countries with the exception of Estonia. Here, full capital account convertibility was achieved in May 1994 when natural persons were allowed to open new foreign currency accounts within the country (Lainela, 1994). Capital account liberalization in the three Visegrad countries has followed an asymmetric pattern. While capital inflows, in particular those related to FDI, were substantially liberalized, a number of restrictions on capital outflows are being maintained.

Recently, the three Visegrad countries have revised their foreign exchange regulations in preparation of their OECD membership. The new Czech Foreign Exchange Law which was passed in September 1995, further liberalizes capital inflows but retains restrictions on capital outflows, in particular on short-term flows (CNB, 1995). The law distinguishes between activities which are free but must be reported, which need a permission of the Czech National Bank, and which are prohibited. A permission of the National Bank is needed for granting loans to abroad, for portfolio investment abroad, and for deposits abroad. Foreign direct investment abroad — defined as investments exceeding 10 percent of the share capital of one company — does not require a permission but must be reported. Similarly, loans from abroad, the issuance of bonds abroad, and the purchase of real estate must be reported. Only the purchase of real estate in the Czech Republic by foreigners is prohibited.

The new Hungarian Foreign Exchange Act took effect in January 1996 (MOF/NBH, 1995; NBH, 1995). Both financial investments of residents outside Hungary and of non-residents inside Hungary require licensing. Hereby, the dividing line between financial investment and FDI is drawn at 10 percent of
the firm’s capital. Raising long-term financial funds with a maturity of more than one year abroad does not require a permission but must be reported.

In Poland, new foreign exchange legislation came into effect in April 1996 (Handelsblatt, 1996). Capital flows linked to FDI are now generally liberalized, and Poles can invest into shares abroad if they acquire a stake in the company exceeding 10 percent of its capital. Other long-term financial transfers such as loans to abroad have been liberalized as well, while a further liberalization of short-term portfolio capital flows is envisaged for early 1997.

Because of restrictions on direct borrowing from abroad and because of the transaction costs involved when tapping a foreign loan market, borrowing from abroad has thus far been of minor importance for the financing of firms in transition economies. According to unpublished data of the Hungarian National Bank and of the Czech National Bank (Olsovský, 1995), loans from abroad amounted to US-$ 665.4 million in Hungary in 1995 and to US-$ 1.550 million in the Czech Republic in 1994.10 Compared to 1993 (Czech Republic: 1991) the volume of loans from abroad has multiplied by a factor of 2.7 (6.5). Nevertheless, new foreign loans have been insignificant, amounting to less than 1 percent of the total increase in domestic credit to firms.

3. Association and Accession to the European Union

In December 1991, the Visegrad countries have signed Europe Agreements with the EU which are intended to promote the countries’ access to the Union. Estonia’s Europe Agreement, which has not yet been ratified by the Estonian parliament, was signed in mid-1995. The Europe Agreements include the following provisions concerning the financial sector and the capital account:11

1. The market entry of foreign banks is liberalized asymmetrically. The reform states can maintain restrictions to the market entry of foreign banks until the end of a ten-year transition period, i.e., until the year 2001. After five years, hence starting in 1997, remaining entry restrictions need to be phased out gradually. Restrictions to the market entry of foreign banks can generally be maintained for reasons of improved monetary control and prudential super-

10 Partly, these difference can be attributed to the fact that in the case of Hungary only guaranteed loans are included.
vision of the banking system. The members of the EU, in contrast, are not allowed to treat banks from the reform states any different than banks from other EU states. Due to a lack of harmonization of banking regulations, however, this regulation has little practical relevance for the access of banks from the reform states to Western markets.

2. While the convertibility of the currencies for current account transactions and for FDI in the nonfinancial sector is ensured, capital account transactions and FDI in banking can be more tightly regulated. During the first phase of the ten-year association period, the preconditions for the full adoption of EU regulations concerning the free flow of capital must be created, during the second phase, the need for the maintenance of restrictions on the capital account will be assessed. Estonia has – in contrast to the Europe Agreements of the Visegrad-countries – already liberalized its capital account vis-à-vis the EU for portfolio capital flows and for foreign bank credits.

3. The EU provides technical and financial assistance to the reform states in order to improve the accounting systems, the legal framework for the operations of financial markets, and the information systems.

In addition to the Europe Agreements, the EU has outlined the prerequisites for accession to the Union in its White Book of 1995 (EU, 1995a).12 Future members of the EU must accept the entire *acquis communautaire* and the regulations of the internal market. This implies, among others, the acceptance of the principles of mutual recognition of banking licenses, of minimum harmonization, and of home country control which are enshrined in the Second Banking Directive of the EU of 1993.13 In addition, the capital account must be liberalized also for short-term capital flows, and restrictions can be maintained only in exceptional cases. Since capital account restrictions can also temporarily be maintained in the member states of the EU, however, the transition economies will presumably have some bargaining power in this area.

12 Apart from the EU regulations, the statutes of the International Monetary Fund (IMF) and the General Agreement on Trade in Services (GATS) of the Uruguay Round deal with the liberalization of capital flows (UNCTAD, 1994a, 1994b). However, the regulations of the EU concerning the internal market impose the most stringent requirements on the reform countries. Articles VIII and XIV of the IMF, for example, only deal with current account and limited capital account convertibility.

13 See Tirole (1995) for a discussion of the question whether the banking regulations of the EU would suit the needs of the transition economies.
IV. FOREIGN BANKING IN TRANSITION ECONOMIES

1. Determinants of FDI in Banking

Important determinants of FDI in banking are the size and the growth potential of the foreign market, and the representation of foreign nonfinancial firms on that market. For the purpose of this paper, (future) market size is proxied by per capita GDP, population size, and the size of the financial system. In terms of GDP per capita, the gap between Western Europe and the reform states is still substantial (Table 1). Measured by its purchasing power, average per-capita GDP of the three Visegrad countries amounts to less than two-thirds of the per-capita GDP of the Southern member states of the EU, Greece and Portugal. In terms of total population, the Visegrad countries are certainly less attractive than, for example, Russia. Nevertheless, the growth potential of the emerging financial markets is quite substantial. With the exception of the Czech Republic, financial deepening – as measured by the ratio of the stock of money (M2) over GDP – in the reform states is substantially lower than in the Western European economies.

Another measure of (future) market volume is FDI in the nonfinancial sector. Because the value of the stock of inward FDI relative to GDP varies quite substantially across countries, comparisons between Eastern and Western Europe are rather difficult. On average, the stock of FDI in the sub-sample of transition economies has been about four percentage points lower than in the group of Western European economies in 1994. Yet, this difference is mainly driven by the inclusion of the United Kingdom with a stock of inward FDI of 49 percent of GDP. If the U.K. is excluded, the difference drops to less than one percentage point. Much more remarkable is the difference between the flows of FDI. In 1994, flows of FDI into the transition economies relative to GDP have on average been more than twice as high as in the member states of the EU.

Despite the potential size of the Eastern European financial market, FDI in the financial sector since the beginning of reforms\textsuperscript{14} has accounted for a relatively small share of total FDI if compared to Western economies (Table 2). In Estonia, only 5.3 percent of FDI has flown into the financial sector, followed

\textsuperscript{14} The data cover the period 1989-95 for the Visegrad countries and the years 1993-95 for Estonia.
by the Czech Republic and Poland with about 10 percent, and Hungary (19.5 percent). In contrast, over the course of the greater integration of financial markets in Western Europe between 1986 and 1992, Italy and Portugal attracted about half of their inward FDI into the financial service sector.

2. Market Shares

Table 3 gives an overview of the structure of the banking systems by the number of banks. Unfortunately, no detailed data on the number of foreign bank representative offices, branches, and subsidiaries have been available for all countries. In the Czech Republic, the number of joint ventures between domestic and foreign banks has risen from 3 to 14 banks between 1991 and 1995. In addition, there were 11 subsidiaries and 10 branches of foreign banks in operation in 1995. Overall, 64 percent of all banks in the Czech Republic had a foreign majority owner in 1995. In terms of total capital invested by foreigners in the Czech banking system, EU banks dominated with a share of 58.3 percent in 1995 (1994: 57.5 percent). Slovak banks accounted for another 19.7 percent (1994: 25.4 percent). In 1995, US banks have gained in importance, raising their share from 4.4 to 12.3 percent of the foreign banks' capital (CNB, 1996b).

In Hungary, 50 percent of the banks have a foreign majority owner. In both the Czech Republic and Hungary have foreigners also acquired minority stakes in a quite substantial number of banks which might give them a controlling stake in the banks. The mere comparison of the number of banks with majority foreign owners may thus give a biased estimate of the actual role of foreigners in the corporate control of banks. Generally, banks with a majority foreign stake in Hungary have tripled in number since 1989 to 22 in 1995. In contrast to the Czech Republic, foreign banks in Hungary cannot open branches (Botos, 1995).

The smallest number of foreign banks of the three Visegrad countries has been present in Poland at the end of 1995 with 9 foreign-owned banks and 3 branches of foreign banks. In addition, 21 banks from abroad have established representative offices in Poland (Wachtel, 1995). Foreign banks in Poland mainly come from the United States, Germany, France, and Austria. In Estonia, only 1 foreign bank branch but 7 representative offices were in operation in April 1996.
The mere number of foreign banks that is operating in a country provides little information about the actual importance of their activities. Experience so far has confirmed prior assumptions that foreign banks are likely to concentrate on trade-related activities and wholesale banking. With a few exceptions, foreign banks have hardly expanded into the retail banking business in Central and Eastern Europe (Wachtel, 1995).

The market shares of foreign banks in the countries under review differ quite substantially (Tables 5-7).\textsuperscript{15} Not always are these differences the result of regulatory barriers to the market entry of foreign banks. Estonia, for example, which has the most liberal regime towards foreign banks also has the smallest share of foreign banks in total assets (2.9 percent in 1996). Obviously, the modest size of the Estonian market is an impediment to greater foreign bank representation.

Market size appears to be similar for the three Visegrad countries. While the bigger size of the Polish market in terms of population should attract foreign banks, FDI in the nonfinancial sector is relatively small as compared to the Czech Republic or Hungary. Hence, in the Visegrad countries, differences in foreign bank representation are more likely to be the result of licensing practices. Accordingly, the market share of foreign and joint venture banks in terms of total assets is highest in Hungary (22.7 percent in 1995) which arguably has the most liberal licensing regime, followed by the Czech Republic (15.9 percent), and Poland (4.4 percent). Also in terms of total capital, foreign banks were more important in Hungary (19.9 percent in 1995) and in the Czech Republic (13.9 percent) than in Poland (8.1 percent).

Generally, foreign banks find it easier to acquire market shares in the credit market than in the deposit market, and they tend to focus their activities on the wholesale banking business. This strategic choice is certainly influenced by the lack of a country-wide branch network which a retail banking strategy would require and which is rather costly to build up. The domestic banks and in particular the traditional savings bank, in contrast, have access to a branch network which eases the accumulation of household savings. Data for Poland show in fact that the market shares of domestic banks are higher in the segment of deposits of natural persons (99.3 percent), who traditionally hold their accounts

\textsuperscript{15} When looking at the market shares of foreign banks, only those banks are considered in which the foreign owner has a majority stake.
with the savings banks, as compared to total deposits (91.9 percent). At the same time, foreign banks can be considered to have superior loan assessment skills than the domestic banks and may thus find it easier to compete on the market for loans. Notwithstanding the importance of inherited bad loans, foreign banks in Poland also have a much smaller share of lost loans in total loans (2 percent vs. 13 percent for the domestic banks) while the share of classified credits tends to converge to roughly 20 percent (Table 7).

3. **Balance Sheet Structure**

With respect to their balance sheet structure, domestic and foreign banks in Hungary display some important differences (Table 8). As regards their assets, domestic banks tend to hold more cash and long-term securities than foreign banks. Partly, the high share of investments in long-term securities reflects the fact that the domestic banks received consolidation bonds recapitalize them for their (inherited) bad debt. To a substantial degree, however, domestic banks also try to restructure their balance sheet towards safe and liquid investments, hereby reducing their exposure to risky clients. Accordingly, the share of accounts receivables and thus of loans to customers in total assets is greater for the foreign banks (74.8 percent in 1994) than for domestic banks (56.2 percent). As far as the structure of loans to customers is concerned, long-term loans are much more important for the domestic banks (43.2 percent of loans to customers) than for the foreign banks (21 percent). This difference reflects both a greater share of inherited long-term assets and a greater caution of the foreign banks towards longer-term commitments. Because of their inherited bad loans, domestic banks held more than 6 percent of their assets in loan loss provisions, as opposed to less than 2 percent for the foreign banks. The major difference between the two groups of banks as far as their liabilities are concerned is the greater reliance of the foreign banks on the interbank market, i.e., on liabilities to other banks, as a source of finance. Not very surprisingly, fully or partially foreign-owned banks in Hungary tend to be better capitalized than domestically-owned banks. Between 1991 and 1994, foreign banks held equity at the amount of 14.5 percent of total assets on average, domestic banks only at 7 percent.

These trends in the structure of assets and liabilities are not a unique feature of the Hungarian banking system. Also in Poland did foreign banks invest a larger share (41.5 percent) of their assets into loans to customers than the do-
mestic banks (33.7 percent), and have investments into securities been less im-
portant for the foreign banks (21.1 versus 31.8 percent).\textsuperscript{16} Also, the share of
capital in total assets for foreign banks in Poland (15.3 percent) has been almost
twice as high as for the domestic banks (8.3 percent). In the \textit{Czech Republic}, the
reliance of foreign banks on the interbank market is greater than for the domes-
tic banks which primarily refinance themselves through deposits (CNB, 1995).

4. \textit{Profitability}

While foreign banks are typically considered to be more efficient and
profitable in their operations than the domestic banks in Central and Eastern
Europe, little consistent data on the sources and uses on bank income that allow
a distinction between the two groups of banks are available. The data which are
being published by the Hungarian State Banking Supervision is an exception to
this rule. Although any data on the balance sheets and income statements of
banks in Central and Eastern Europe must be interpreted with substantial cau-
tion because of the lack of reliable accounting data and the gradual adoption of
accounting standards to Western levels, the available evidence allows some
conclusions to be drawn.

Table 9 shows that there has generally been a convergence between do-
mestic and foreign banks with respect to gross income generated out of banks’
assets. While gross income margins relative to total assets of domestic banks
had been 2-3 percentage points below those of foreign banks in 1992-1993,
these margins converged to a level of about 8 percent in 1994. Gross income
relative to total equity, in contrast, was much higher for the domestic banks be-
cause of their lower equity share in total assets. With regard to the sources of
income, (net) non-interest income was in 1992 and 1993 more important for the
foreign banks with about 40 percent of total income as opposed to 20-25 per-
cent for the domestic banks. Because only net data are reported, this may reflect
different areas of specialization as well as differences in investments into new
technology.

The most significant difference between domestic and foreign banks is
with respect to costs which have consistently been higher for the domestic
banks. In particular in 1993 when the banks made provisions for their bad assets

\textsuperscript{16} Data as of 1995 have been calculated from Olechowska (1996, p. 12).
at the amount of 9.1 percent of their assets or 91.9 percent of their equity, total costs have been twice as high in the domestic banks as in the foreign banks. Operating costs of the domestic banks were also higher than for the foreign banks throughout the sample period. As a consequence of lower income and higher costs, the domestic banks' return on assets was lower than that of foreign-owned banks. While real return on equity (ROE) already turned positive in the foreign banks in 1993 or 1994, depending on which price index is used, domestic banks achieved a positive real ROE only on the basis of producer prices in 1994. Again, data from Poland confirm this trend (Table 7). Here, return on assets has been higher for the foreign than for domestic banks in 1994-95. Yet, because of their lower share of capital relative to total assets, the domestic banks were able to achieve approximately the same ROE as the foreign banks.17

V. CONCLUSIONS

Liberalizing the market access of foreign banks allows the production of financial services according to comparative advantage, it fosters competition, it may promote bank privatization, and it facilitates a transfer of know-how into the emerging financial systems. In order to reap these benefits, most Central European reform states had adopted a relatively liberal attitude towards the market entry of foreign banks at the beginning of the reform process. Yet, as reforms continued and as non-performing loans started to threaten the viability of the traditional domestic banks, this liberal stance has been replaced by a more cautious approach, and quantitative restrictions on new banking licenses have at least temporarily been introduced. In the meantime, these restrictions have been relaxed somewhat, and the domestic banks have been recapitalized for most of their inherited bad loans. In addition, banking regulations have gradually been adjusted to Western standards, and banking supervision has been tightened.

Entering the second stage of banking reforms, those countries which are already associated with the EU have to consider the full implementation of the acquis communautaire, i.e., among others the full implementation of free trade in financial services. Currently, FDI in banking in the countries of Central and Eastern Europe is still subject to a number of explicit and implicit entry barriers.

17 Note, however, that due to the higher share of bad loans in total loans for the domestic banks, equity values may still be overstated.
Because of the reform progress that has already been made, abolishing entry barriers and allowing for home country control of foreign banks is unlikely to put the overall stability of the banking systems in the countries under review at risk. Yet, it would allow exploiting the benefits of open markets.

The empirical analysis of this paper has shown that foreign banks have already made substantial inroads into the more advanced reform states. While the growth in the number of foreign banks is thus likely to slow down, foreign banks can still play a fruitful role in the privatization of domestic banks, in the consolidation of the banking systems, and in the deepening of financial market reforms. At the same time, the analysis does not support unrestricted market access for all foreign banks. Due to asymmetries of information that prevail in financial markets, a case can be made for some basic prudential regulation and supervision (Dewatripont/Tirole, 1994). The transition economies may thus be selective and allow unrestricted market access only to those banks that come from countries where compliance with international banking standards can be guaranteed by the home country banking supervision.

Many other reform states, notably most successor states of the former Soviet Union, may find it useful to study the experience of Central Europe with the market entry of foreign banks. The current structure and specialization profiles of foreign banks confirm the view that trade in goods, FDI in the nonfinancial sector, and the market entry of foreign banks are complements. Foreign banks tend to follow their corporate clients abroad, and they tend to focus their activities on relatively small market niches. Liberalizing the market entry of foreign banks can thus have positive spill-over effects for other reform areas. The most important sequencing issue that arose from this paper is that the incumbent banks should have received some compensation for their truly inherited bad loans before markets are opened up for foreign banks. Because the market entry of foreign banks can actually help to prevent new bad loans from emerging, there is no case for restricting market entry after recapitalization has taken place. Quite to the contrary, foreign banks can contribute to improved efficiency in banking as a prerequisite for a lasting stability of the banking systems in the transition economies.
### Appendix

**Table 1 — Determinants of the Size of the Financial Markets in Europe, 1994.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[mil.]</td>
<td>[$]</td>
<td>[$, PPP]</td>
<td>Stock (%)</td>
</tr>
<tr>
<td><strong>Western Europe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>8.0</td>
<td>24,630</td>
<td>19,560</td>
<td>6.6</td>
</tr>
<tr>
<td>France</td>
<td>57.9</td>
<td>23,420</td>
<td>19,670</td>
<td>10.7</td>
</tr>
<tr>
<td>Germany</td>
<td>81.5</td>
<td>25,580</td>
<td>19,480</td>
<td>7.2</td>
</tr>
<tr>
<td>Greece</td>
<td>10.4</td>
<td>7,700</td>
<td>10,930</td>
<td>18.7</td>
</tr>
<tr>
<td>Italy</td>
<td>57.1</td>
<td>19,300</td>
<td>18,460</td>
<td>5.9</td>
</tr>
<tr>
<td>Portugal</td>
<td>9.9</td>
<td>9,320</td>
<td>11,970</td>
<td>6.6</td>
</tr>
<tr>
<td>Spain</td>
<td>39.1</td>
<td>13,440</td>
<td>13,740</td>
<td>23.5</td>
</tr>
<tr>
<td>UK</td>
<td>58.4</td>
<td>18,340</td>
<td>17,970</td>
<td>49.2</td>
</tr>
<tr>
<td><strong>Averaged[^d]</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average (excl. UK)[^d]</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Central and Eastern Europe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>10.3</td>
<td>3,200</td>
<td>8,900</td>
<td>9.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>1.5</td>
<td>2,820</td>
<td>4,510</td>
<td>21.9</td>
</tr>
<tr>
<td>Hungary</td>
<td>10.3</td>
<td>3,840</td>
<td>6,080</td>
<td>16.4</td>
</tr>
<tr>
<td>Poland</td>
<td>38.5</td>
<td>2,410</td>
<td>5,480</td>
<td>4.8</td>
</tr>
<tr>
<td>Russia</td>
<td>148.3</td>
<td>2,650</td>
<td>4,610</td>
<td></td>
</tr>
<tr>
<td><strong>Averaged[^d]</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**Sources:** Deutsche Bundesbank (1996); IMF (1996); OECD (1994a, 1994b, 1994c); UNCTAD (1995); World Bank (1996a, 1996b).
Table 2 — Foreign Direct Investment into the Financial Sector of Selected European Countries.

<table>
<thead>
<tr>
<th>Western Europe</th>
<th>FDI in financial services (% of total FDI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1992 - 1994</td>
</tr>
<tr>
<td>Greece</td>
<td>1987 - 1989</td>
</tr>
<tr>
<td>Italy</td>
<td>1980 - 1985</td>
</tr>
<tr>
<td></td>
<td>1986 - 1992</td>
</tr>
<tr>
<td>Portugal</td>
<td>1980 - 1985</td>
</tr>
<tr>
<td></td>
<td>1986 - 1992</td>
</tr>
<tr>
<td>Central and Eastern Europe</td>
<td>FDI in financial services (% of total FDI)</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1989 - June 1995</td>
</tr>
<tr>
<td>Estonia</td>
<td>1993 - 1995</td>
</tr>
<tr>
<td>Hungary</td>
<td>1989 - June 1993</td>
</tr>
<tr>
<td>Poland</td>
<td>1989 - June 1995</td>
</tr>
</tbody>
</table>

<sup>a</sup> Direct and indirect FDI in credit institutions.

Table 3 — Structure of the Banking Systems by Number of Banks, 1989-1995.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Czech Republic</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All banks</td>
<td>5</td>
<td>18</td>
<td>31</td>
<td>48</td>
<td>53</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>Domestic, state-owned</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Domestic, private</td>
<td>1</td>
<td>10</td>
<td>16</td>
<td>25</td>
<td>24</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>With foreign participation</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Foreign subsidiaries&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Foreign branches</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Estonia</strong>&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>26</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Domestic banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>42</td>
<td>24</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Hungary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All banks</td>
<td>23</td>
<td>29</td>
<td>36</td>
<td>40</td>
<td>43</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Domestic&lt;sup&gt;d&lt;/sup&gt;</td>
<td>16</td>
<td>21</td>
<td>23</td>
<td>24</td>
<td>23</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>With foreign majority participation</td>
<td>7</td>
<td>8</td>
<td>13</td>
<td>16</td>
<td>20</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All banks</td>
<td>20</td>
<td>52</td>
<td>74</td>
<td>84</td>
<td>87</td>
<td>82</td>
<td>84</td>
</tr>
<tr>
<td>State-owned</td>
<td>16</td>
<td>15</td>
<td>15</td>
<td>14</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Private</td>
<td>4</td>
<td>37</td>
<td>59</td>
<td>69</td>
<td>72</td>
<td>67</td>
<td>72&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Domestic</td>
<td>4</td>
<td>34</td>
<td>53</td>
<td>63</td>
<td>65</td>
<td>...</td>
<td>63</td>
</tr>
<tr>
<td>Foreign</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>...</td>
<td>9</td>
</tr>
<tr>
<td>Privatized</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>...</td>
</tr>
</tbody>
</table>

End of period. — Classification according to the ownership status of the majority shareholders. — a) Excluding building associations and banks under conservatorship. — b) 100 percent foreign-owned. — c) 1995 = April 1996. — d) Including specialized financial institutions. — e) Including privatized banks.

Table 4 — Market Shares in the Czech Republic by Banking Groups, 1990-1995.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>91.2</td>
<td>88.1</td>
<td>82.9</td>
</tr>
<tr>
<td>Large banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>82.3</td>
<td>79.3</td>
<td>73.7</td>
</tr>
<tr>
<td>Small banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>8.9</td>
<td>8.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>7.2</td>
<td>11.3</td>
<td>15.9</td>
</tr>
<tr>
<td>Subsidiaries</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>5.7</td>
<td>7.2</td>
<td>9.9</td>
</tr>
<tr>
<td>Branches</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>1.5</td>
<td>4.1</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Underwritten capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>81.5</td>
<td>83.5</td>
<td>81.6</td>
</tr>
<tr>
<td>Large banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>58.6</td>
<td>61.4</td>
<td>57.9</td>
</tr>
<tr>
<td>Small banks</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>22.9</td>
<td>22.1</td>
<td>23.7</td>
</tr>
<tr>
<td>Foreign subsidiaries</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>12.9</td>
<td>12.7</td>
<td>13.9</td>
</tr>
<tr>
<td><strong>Credit market</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic banks</td>
<td>100.0</td>
<td>98.7</td>
<td>97.3</td>
<td>95.7</td>
<td>92.5</td>
<td>91.7</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>0.0</td>
<td>1.2</td>
<td>2.7</td>
<td>4.3</td>
<td>7.5</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Deposit market</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic banks</td>
<td>99.6</td>
<td>99.4</td>
<td>97.3</td>
<td>96.4</td>
<td>93.5</td>
<td>93.2</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>0.4</td>
<td>0.6</td>
<td>2.3</td>
<td>3.6</td>
<td>6.5</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Domestic banks include banks with a foreign minority owner. — a) Data do not add up to 100 percent because building societies are not considered. 1993 = 1.1.1994.

Source: CNBb (March, 1996); CNBc (1994,1995); own calculations.

<table>
<thead>
<tr>
<th></th>
<th>1991</th>
<th>1993</th>
<th>1994</th>
<th>1995a</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large domestic</td>
<td>...</td>
<td>75.4</td>
<td>70.1</td>
<td>66.6</td>
</tr>
<tr>
<td>banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small domestic</td>
<td>...</td>
<td>9.2</td>
<td>10.2</td>
<td>10.7</td>
</tr>
<tr>
<td>banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign banks</td>
<td>...</td>
<td>15.4</td>
<td>19.7</td>
<td>22.7</td>
</tr>
<tr>
<td><strong>Registered capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large domestic</td>
<td>...</td>
<td>64.8</td>
<td>63.1</td>
<td>55.3</td>
</tr>
<tr>
<td>banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small domestic</td>
<td>...</td>
<td>21.1</td>
<td>20.6</td>
<td>24.8</td>
</tr>
<tr>
<td>banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign banks</td>
<td>...</td>
<td>14.1</td>
<td>16.3</td>
<td>19.9</td>
</tr>
<tr>
<td><strong>Receivables from customers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large domestic</td>
<td>77.1</td>
<td>75.2</td>
<td>68.2</td>
<td>64.7</td>
</tr>
<tr>
<td>banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small domestic</td>
<td>10.7</td>
<td>9.3</td>
<td>10.9</td>
<td>10.8</td>
</tr>
<tr>
<td>banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign banks</td>
<td>12.2</td>
<td>15.5</td>
<td>20.9</td>
<td>24.5</td>
</tr>
<tr>
<td><strong>Liabilities to customers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large domestic</td>
<td>...</td>
<td>79.4</td>
<td>76.1</td>
<td>73.6</td>
</tr>
<tr>
<td>banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small domestic</td>
<td>...</td>
<td>7.6</td>
<td>8.5</td>
<td>8.8</td>
</tr>
<tr>
<td>banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign banks</td>
<td>...</td>
<td>13.0</td>
<td>15.4</td>
<td>17.6</td>
</tr>
</tbody>
</table>

*Foreign banks = banks with a foreign majority owner. — a) June.*

*Sources:* SBS (1993, 1994a, 1995)
Table 6 — Market Shares of Foreign Banks in Estonia, 1995-1996.

<table>
<thead>
<tr>
<th></th>
<th>1995 (April)</th>
<th>1995 (December)</th>
<th>1996 (April)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>0.9</td>
<td>2.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Loans to customers</td>
<td>1.2</td>
<td>3.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Deposits of customers</td>
<td>1.4</td>
<td>1.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Foreign banks = INKO Balti Pank, Merita Pank.

Sources: Eesti Pank (b and c).
Table 7 — Indicators of Foreign Banks in Poland, 1994-1995.

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>3.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Capital</td>
<td>3.9</td>
<td>8.1</td>
</tr>
<tr>
<td>Credits(^a)</td>
<td>3.9</td>
<td>5.4</td>
</tr>
<tr>
<td>Total deposits(^a)</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Deposits of natural persons</td>
<td>0.4</td>
<td>0.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Foreign banks</th>
<th>All banks(^c)</th>
<th>Foreign banks</th>
<th>All banks(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classified credits</td>
<td>1.3</td>
<td>29.3</td>
<td>19.7</td>
<td>21.7</td>
</tr>
<tr>
<td>Lost credits</td>
<td>1.2</td>
<td>17.9</td>
<td>2.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Return on assets (ROA)(^b)</td>
<td>6.2</td>
<td>4.1</td>
<td>3.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Return on equity (ROE)(^b)</td>
<td>64.7</td>
<td>62.8</td>
<td>39.1</td>
<td>37.5</td>
</tr>
</tbody>
</table>

\(^a\) Credits and deposits of the nonfinancial sector. \(^b\) Based on average assets and equity during the period. \(^c\) Commercial banks, excluding cooperative banks.


<table>
<thead>
<tr>
<th></th>
<th>All banks</th>
<th>Foreign and joint venture banks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>83.9</td>
<td>84.7</td>
</tr>
<tr>
<td>Securities</td>
<td>16.9</td>
<td>19.7</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>3.5</td>
<td>6.2</td>
</tr>
<tr>
<td><strong>Short-term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banks</td>
<td>10.2</td>
<td>10.4</td>
</tr>
<tr>
<td>Customers</td>
<td>26.2</td>
<td>25.6</td>
</tr>
<tr>
<td><strong>Long-term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banks</td>
<td>3.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Customers</td>
<td>16.1</td>
<td>17.5</td>
</tr>
<tr>
<td>Provisions</td>
<td>0.0</td>
<td>-2.7</td>
</tr>
<tr>
<td><strong>Investments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.3</td>
<td>13.1</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>68.6</td>
<td>72.6</td>
</tr>
<tr>
<td>Banks</td>
<td>17.3</td>
<td>10.8</td>
</tr>
<tr>
<td>Customers</td>
<td>42.3</td>
<td>52.6</td>
</tr>
<tr>
<td>Long-term liabilities</td>
<td>18.4</td>
<td>17.1</td>
</tr>
<tr>
<td><strong>Provisions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered capital</td>
<td>5.6</td>
<td>5.5</td>
</tr>
<tr>
<td>Profit</td>
<td>0.6</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

Data do not add up to 100 percent because deferred assets and liabilities have been omitted.


<table>
<thead>
<tr>
<th></th>
<th>All banks</th>
<th></th>
<th></th>
<th></th>
<th>Foreign and joint venture banks</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Asset Ratios (% of total assets)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest margin</td>
<td>4.8</td>
<td>3.8</td>
<td>5.0</td>
<td>6.0</td>
<td>5.5</td>
<td>5.4</td>
<td>5.0</td>
<td>4.6</td>
</tr>
<tr>
<td>Non-interest income (net)</td>
<td>2.2</td>
<td>2.6</td>
<td>1.3</td>
<td>2.1</td>
<td>1.8</td>
<td>3.7</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Gross income</td>
<td>7.0</td>
<td>6.4</td>
<td>6.3</td>
<td>8.1</td>
<td>7.3</td>
<td>9.1</td>
<td>8.6</td>
<td>8.2</td>
</tr>
<tr>
<td>Operating costs</td>
<td>5.5</td>
<td>6.0</td>
<td>3.4</td>
<td>3.8</td>
<td>3.0</td>
<td>5.3</td>
<td>3.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Provisions</td>
<td>0.0</td>
<td>0.1</td>
<td>9.1</td>
<td>2.7</td>
<td>0.0</td>
<td>0.1</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Total costs</td>
<td>5.5</td>
<td>6.1</td>
<td>12.5</td>
<td>6.5</td>
<td>3.0</td>
<td>5.4</td>
<td>5.5</td>
<td>5.0</td>
</tr>
<tr>
<td>Extraordinary profit</td>
<td>-0.0</td>
<td>-0.3</td>
<td>-0.1</td>
<td>-0.3</td>
<td>-0.1</td>
<td>-1.4</td>
<td>-0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Pre-tax income</td>
<td>1.4</td>
<td>0.0</td>
<td>-6.3</td>
<td>1.3</td>
<td>4.2</td>
<td>2.3</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Taxes</td>
<td>0.5</td>
<td>0.2</td>
<td>0.2</td>
<td>0.4</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>After-tax income (ROA)</td>
<td>0.9</td>
<td>-0.2</td>
<td>-6.5</td>
<td>0.9</td>
<td>3.6</td>
<td>1.7</td>
<td>2.3</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Operating Income Ratios (% of total income)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest margin</td>
<td>68.8</td>
<td>58.5</td>
<td>79.6</td>
<td>74.4</td>
<td>75.6</td>
<td>59.1</td>
<td>57.9</td>
<td>56.4</td>
</tr>
<tr>
<td>Non-interest income (net)</td>
<td>31.2</td>
<td>41.5</td>
<td>20.4</td>
<td>25.6</td>
<td>24.4</td>
<td>40.9</td>
<td>42.1</td>
<td>43.6</td>
</tr>
<tr>
<td>Gross income</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Operating costs</td>
<td>79.3</td>
<td>94.1</td>
<td>55.1</td>
<td>46.1</td>
<td>40.6</td>
<td>58.1</td>
<td>36.5</td>
<td>35.4</td>
</tr>
<tr>
<td>Provisions</td>
<td>0.0</td>
<td>0.9</td>
<td>145.1</td>
<td>34.4</td>
<td>0.0</td>
<td>0.9</td>
<td>28.2</td>
<td>25.9</td>
</tr>
<tr>
<td>Total costs</td>
<td>79.3</td>
<td>95.0</td>
<td>200.2</td>
<td>80.5</td>
<td>40.6</td>
<td>59.1</td>
<td>64.7</td>
<td>61.3</td>
</tr>
<tr>
<td>Extraordinary profit</td>
<td>-0.2</td>
<td>-4.3</td>
<td>-0.0</td>
<td>-3.9</td>
<td>-1.9</td>
<td>-14.9</td>
<td>-0.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Pre-tax income</td>
<td>20.5</td>
<td>0.7</td>
<td>-100</td>
<td>15.6</td>
<td>57.5</td>
<td>26.1</td>
<td>34.7</td>
<td>38.7</td>
</tr>
<tr>
<td>Taxes</td>
<td>6.7</td>
<td>3.1</td>
<td>2.4</td>
<td>5.2</td>
<td>7.6</td>
<td>7.0</td>
<td>7.9</td>
<td>6.5</td>
</tr>
<tr>
<td>After-tax income (ROA)</td>
<td>13.8</td>
<td>-2.4</td>
<td>-103</td>
<td>10.4</td>
<td>49.9</td>
<td>19.1</td>
<td>26.8</td>
<td>32.2</td>
</tr>
<tr>
<td><strong>Return on Equity (ROE) (% of total equity)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal ROE</td>
<td>12.7</td>
<td>-2.0</td>
<td>-65.6</td>
<td>14.2</td>
<td>25.1</td>
<td>10.6</td>
<td>15.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Real ROE (CPI)b</td>
<td>-16.6</td>
<td>-20.2</td>
<td>-71.9</td>
<td>-3.8</td>
<td>-7.5</td>
<td>-9.9</td>
<td>-6.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Real ROE (PPI)b</td>
<td>-14.9</td>
<td>-12.1</td>
<td>-68.9</td>
<td>2.6</td>
<td>-5.7</td>
<td>-0.8</td>
<td>3.8</td>
<td>10.5</td>
</tr>
</tbody>
</table>

a) Detailed information about provisioning expenditures for 1991-1992 has not been available. These may be included in total costs and are therefore understated. From 1993 on, according to Hungarian accounting standards, provisions are identical to the item "other expenses" which includes other losses as well. — b) Real variables based on average price changes during the period.

List of References


CZECH NATIONAL BANK (CNBa), Indicators of Monetary and Economic Developments in the Czech Republic (monthly), various issues, Prague.

— (CNBb), Vybrané Ukazatele Menoveho Vývoje České Republiky (Selected Indicators of Monetary Development in the Czech Republic), various issues, Prague.

— (CNBc), Annual Report, various issues, Prague.


— (1996b), Banking Supervision in the Czech Republic, Prague.

DEUTSCHE BUNDESBANK (1996), Kapitalverflechtungen mit dem Ausland, Statistische Sonderveröffentlichung, No. 10, May, Frankfurt a.M.

DEWATRIPONT, Mathias, and Jean TIROLE (1994), The Prudential Regulation of Banks, Cambridge.


— (a), Annual Report, various issues, Tallinn.

— (b), Bulletin, various issues, Tallinn.

— (c), Statistical Datasheets, various issues, Tallinn.


— (1995a), Weißbuch – Vorbereitung der Assoziierten Staaten Mittel- und Osteuropas auf die Integration in den Binnenmarkt der Union (Annexe), KOM(95) 163 endg./2, Brussels.


SAGARI, Silvia B. (1992), United States foreign direct investment in the banking industry, Transnational Corporations, Vol. 1, No. 3, 93-123.


THE WORLD BANK (1996a), Global Economic Prospects and the Developing Countries, Washington D.C.