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Kiel Working Papers

Kiel Working Paper No. 716

**The Emerging Financial Systems of
the Eastern European Economies**

– A Progress Report –

by

Claudia M. Buch



Institut für Weltwirtschaft an der Universität Kiel
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TABLE OF CONTENTS

| | |
|---|-----------|
| I. Introduction | 1 |
| II. Goals of Financial System Reform | 2 |
| III. Costs and Benefits of Different Financial Systems | 5 |
| 1. Types of Financial Systems | 5 |
| 2. Needed Institutional Infrastructure | 7 |
| 3. Universal vs. Separated Banking | 10 |
| 3.1. Advantages of Universal Banking | 11 |
| 3.2. Risks of Universal Banking | 14 |
| 3.3. Conclusions | 18 |
| 4. Evidence from Developed and Developing Countries | 20 |
| IV. Empirical Evidence from Eastern Europe | 24 |
| 1. The Relationship of Banks and Firms | 24 |
| 1.1. Universal Banking | 25 |
| 1.2. Bank Involvement in Enterprise Restructuring | 27 |
| 2. Legal Regulations of Financial Markets | 35 |
| 3. Financial Market Structure | 37 |
| 3.1. The Financial Structure of Firms | 37 |
| 3.2. Importance of Non-Bank Financial Intermediation | 40 |
| V. Summary and Conclusions | 43 |

LIST OF GRAPHS AND TABLES

| | |
|--|----|
| Graph 1 — Structure of the Czech Investment Funds | 29 |
| Table 1 — Monitoring under Debt and Equity Finance..... | 8 |
| Table 2 — The Financing of Firms in Selected Economies | 21 |
| Table 3 — Importance of Net Non-Interest Income in Eastern Europe Banks, 1991-1994 | 27 |
| Table 4 — Results of the Polish Program on the Restructuring of Banks and Enterprises, 1994 | 32 |
| Table 5 — Sources of Financial Funds in the Czech Republic, 1989- 1994 | 38 |
| Table 6 — Indicators of Non-Bank Financial Intermediation, 1993-1994 | 41 |
| Table 7 — Stock Market Indicators, 1994..... | 42 |
| Table 8 — Indicators of Corporate Governance Structures in the Czech Republic, Hungary, and Poland..... | 47 |

I. INTRODUCTION*

During the transition from plan to market, financial system reform is playing a key role by linking the three major reform areas. Financial liberalization – notably the liberalization of the domestic banking system – has implications for the success of monetary and fiscal stabilization. It has an impact on the effect of the liberalization of prices, and it closely relates to the overhaul of the institutional infrastructures of the economies. The potential contribution of banks to this process depends on the type of financial system that is being implemented. Because the emergence of a particular financial system is to a large extent path dependent (Patrick, 1995), the selection of an appropriate reform strategy early on is thus of major importance.

The purpose of this paper is to review the arguments that have been brought forward in favor or against different types of financial systems, to assess their relevance for the Eastern European setting, and to present empirical evidence as to the actual financial structures that are emerging. Incidentally, the empirical assessment of the reform process to date largely has to rely on anecdotal evidence. Little microeconomic evidence on the role of banks in the corporate governance and restructuring of firms is available, and no representative studies of the banking industries have so far been made. Hence, the present paper can only outline some major trends that seem to prevail and that are supported by the data.

After describing the major goals of the reform process (Part 2), the paper proceeds by analyzing the costs and benefits of different types of financial systems and briefly reviews some lessons from developed and developing market economies (Part 3). Particular attention is assigned to the potential merits of a universal banking system. Subsequently, the empirical evidence from Eastern Europe is being presented (Part 4). Part 5 concludes.

The analysis focuses on the experience of the more advanced reform states of Eastern Europe, i.e. the Czech Republic, Hungary, and Poland. All these countries have actually already opted for some form of universal banking system.

* This paper has been written during a research visit of the author at the New York University Salomon Center. The research that is being presented in this paper has been conducted in the context of a research project on "Financial Markets in the Transformation Process — Precondition or Result of Successful Reforms?". Financial support of the Volkswagen Foundation is gratefully acknowledged.

There is thus little scope for discussing optimal initial policies. Yet, the approaches which the countries have chosen in order to involve banks in the process of enterprise restructuring are far from being uniform, and it should be interesting to see what effects the reforms have had for bank behavior. The findings of this paper furthermore provide insights into required reform elements in those economies further East which have not yet effectively started to reform their banking systems. Also, the results should help to resolve regulatory questions that come up in the countries under review.

II. GOALS OF FINANCIAL SYSTEM REFORM

Ultimately, the main goal of the transformation process is to move the economies in transition from an inefficient production point well below their production possibility frontier towards a point on their transformation curve and to allow for sustained economic growth. In order to achieve these goals, the process of central planning has to be replaced by a system of market-based decision making which allows efficiency gains to be realized. The financial system plays a key role in this process because it links the savings and investment decisions within an economy.¹ Banks and other financial intermediaries thus have to offer savings vehicles which provide incentives to save, and they should allocate the financial funds to their most efficient uses. Enabling intermediaries to detect profitable investment opportunities is therefore a crucial task of reforms.

The efficiency of the allocation of financial resources is closely linked to the ability of banks to overcome informational asymmetries in financial markets. These asymmetries arise because firms are typically better informed about the quality of their investment projects than outside investors. Yet, to the extent that information has public good characteristics, this information gap cannot simply be overcome by selling information to potential investors (Leland/Pyle, 1977). As Diamond (1984) has shown, banks contribute to reducing asymmetries in information by utilizing economies of scale when monitoring borrowers. The joint financing of investment projects and the intermediation of financial funds through

¹ Financial system reform also has major implications for the conduct of macro-economic stabilization programs. Yet, these issues are not directly dealt with in this paper. The interdependence between banking sector reform and monetary policy is, for example, discussed in Buch (1995).

banking institutions becomes cheaper than their separate provision.² In addition to the problems arising from asymmetries in information, general uncertainty about the quality of a loan customers is inherent to any lending contract. This is because loans can be viewed as put options written on the (uncertain) future income streams of an enterprise.

The above reasoning implies why efficient financial intermediaries and in particular banks are of special relevance for the transition economies. First, asymmetries in information are of greater importance in the transition economies than in developed Western market economies. Standardized contracts and loan assessment procedures hardly exist. Many enterprises cannot offer sufficiently long track records, and loan assessment systems are too underdeveloped to support the analysis even of the available accounting information. Transaction costs comprising the cost of measuring, the cost of enforcement, and the costs of impersonal exchanges (North, 1992) are thus substantial in these markets. Second, banks have traditionally been the major players in the (nascent) financial systems and are unlikely to be challenged by other non-bank intermediaries in the near future. One key goal of reforms should thus be to improve the efficiency of existing intermediaries and to enhance their ability to support real sector adjustment.

More specifically, the scale and efficiency of real sector restructuring will, on the one hand, depend on the degree to which new, private enterprises can emerge. Successfully supporting the emergence of private enterprises, i.e. the privatization from below, mainly requires *ex ante* informational asymmetries to be overcome.³ Stiglitz and Weiss (1981) have shown that asymmetries in information in credit markets can lead to adverse selection effects and to equilibrium credit rationing. In such a scenario, some borrowers are excluded from the credit market although they would be willing to pay the market interest rate. Credit rationing is less likely to occur if (i) borrowers have sufficient net worth and can thus offer collateral to secure their loans and if (ii) banks operate in a competitive environment (Bester, 1985; Calomiris/Hubbard, 1990; Hellwig, 1988). Yet, these conditions do not apply to the Eastern European situation, and they are particularly violated for the cases of small, new enterprises. Small new firms do not have records of past performance, and they have typically few assets which might

² Financial intermediaries thus emerge endogenously in these models. Williamson (1987) shows this for the case of *ex post* asymmetric information on the behavior of borrowers.

³ These asymmetries occur before finance is granted and relate to the fact that borrowers know the quality of their investment projects which lenders cannot observe.

serve as collateral at their disposal. Hence, credit to small firms is likely to be rationed, allowing only those firms to stay in business which can finance their expansion from internally generated funds. Growth would be suboptimal in such a scenario because profitable firms which projects yield high returns only after some periods would be excluded from the credit market. Establishing a financial system which contributes to overcoming ex ante informational asymmetries and to providing finance to these firms would thus be growth-promoting.

On the other hand, the adjustment of existing state-owned enterprises to the new environment is of key importance for successful real sector restructuring. In the case of existing state-owned enterprises, the potential role of financial intermediaries is most importantly related to overcoming ex post informational asymmetries and to impose effective mechanisms of corporate control on these firms. As Frydman and Rapaczynski (1994, p. 52) note *although free market prices are certainly necessary for a proper functioning of the economy, the processing of the information conveyed by the prices and the economically desirable responses to market signals at the enterprise level require the existence of an appropriate corporate governance structure*. The successful privatization of state-owned firms – i.e. the privatization from above – thus implies that a new governance structure needs to be found which can bridge the gap that the withdrawal of state control creates.

In particular at the early transformation stage, state-owned enterprises tend to have fairly easy access to credit resources because of their well-established relationships with the existing banks. Yet, the efficient utilization of these funds is crucial. If, however, the actions of firm management cannot easily be observed by outsiders, moral hazard problems are likely to occur in the predominantly large state-owned enterprises. These moral hazard problems are due to different objective functions of the principal and of his agent. In a market-type setting, the owners of an enterprise are interested in maximizing the present value of the firm, hence preferring profitable, high-risk projects. Yet, the firm's management may be seeking to guarantee itself a certain fixed salary while minimizing the effort that it has to put up in order to receive this remuneration. Hence, managers may rather be interested in choosing low-return, low-risk projects. Because stakeholders cannot observe whether good performance is due to the efforts of the management or instead due to favorable external factors, they may reward management even if its effort level has been low. (Bös/Peters, 1989).

In the Eastern European setting, agency problems and possible divergences of objective functions are even more complex than in the simple scenario above. Most importantly, the government as the owner of state enterprises may not be seeking to maximize profits but rather to maintain employment at its current level or to extract short-term dividends from the firms. It may thus not seek to maximize the overall present value of its assets. At the same time, the organizational structure of firms is typically more diffuse. Workers often have an important say in enterprise affairs and managers may try to engage in some type of asset stripping, intending to maximize their own personnel wealth. While a discussion of different management compensation schemes as well as of the complexity of principal-agent relationships that can be observed in reality is beyond the scope of this paper, it is important to note that differences in objective functions require mechanisms of corporate control to be implemented. This requirement is more pronounced for the large state-owned enterprises rather than for small, new enterprises in which ownership and control are less likely to be separated. In other words, financial systems that allow for an efficient corporate control structure of state-owned enterprises before, during, and after privatization will promote growth.

III. COSTS AND BENEFITS OF DIFFERENT FINANCIAL SYSTEMS

The previous section has shown that banks and other financial intermediaries can contribute to the reduction of ex ante informational asymmetries by allowing more efficient firms to be selected from a pool of seemingly identical customers as well as by reducing ex post informational asymmetries by improving the corporate governance of firms. This section will analyze to what extent different financial systems are suited to achieve these goals.

1. Types of Financial Systems

Generally, quite a few classifications of financial systems can be found in the literature. In this paper, the focus will be on the potential benefits of a universal as opposed to a separated banking system. In some cases, universal banks are simply labeled as those banks which offer „all“ kinds of financial services, as opposed to those „specialized“ banks which concentrate their activities only in a few areas. Yet, such a broad classification has two flaws. First, it leaves out of consideration whether banks voluntarily decide to specialize only into a certain range of activities or whether the observed limitations are the result of regulations that have been imposed on the banks. Second, the above classification does not

allow a separation between certain key areas in which financial intermediaries may be active. Yet, as will be shown below, spill-overs between the lending and the securities business as well as the possibility of banks to hold equity stakes in firms are relevant when discussing the costs and benefits of universal banking systems.

In order to give a general classification of financial systems, this paper follows Steinherr (1995) who differentiates between bank- and market-based financial systems on the one hand and between universal and specialized banks on the other hand. In a market-based financial system, markets for debt and equity play an important role in attracting and allocating financial funds. In such a system – as opposed to a bank-based system –, external equity finance is typically more important than debt finance, and debt finance itself is more likely to be raised through bond markets rather than through bank loans. Although universal banking systems are typically classified as bank-based financial systems, market-based financial systems can also display features of universal banking. The British financial system is a case in point. While market-based institutional structures dominate the process of financial intermediation, banks are universal in the sense that the underwriting of securities can be performed by separately incorporated institutions under the roof of a common holding company.⁴ In order to simplify the discussion, this paper will take their *ability to control firm management through the equity positions that they hold in the firms* as the most important feature of universal banks. In addition to equity holdings, institutional arrangements such as proxy votings or board membership of bankers within firms can give universal banks equity-like control rights (Harm, 1992). Furthermore, universal banks are allowed to underwrite securities whereas in a separated banking system, commercial and investment banking activities are strictly separated.

In the transition economies, the method that is being chosen for the privatization of state-owned enterprises has important implications for the type of financial system that is emerging.⁵ Choosing a voucher privatization method such as in the Czech Republic or in Russia – more recently also in Poland – implies that a large amount of equity becomes publicly traded, thus tending to promote

⁴ In other words, a bank-based universal banking system is identical to a fully integrated universal banking system whereas the British model resembles a bank subsidiary structure (Saunders/Walter, 1994, p. 67).

⁵ See also Frydman/Rapaczynski (1994). Earle/Frydman/Rapaczynski et al. (1993) and Frydman et al. (1993) describe and analyze the privatization strategies in Central and Eastern Europe.

the evolution of a market-based financial systems. Yet, as will be shown below (Section IV.1.2.), even a voucher privatization method may lead to the concentration of ownership stakes in a comparatively small number of investment funds. Choosing a direct sales method for the privatization of state-owned firms such as in Hungary or in Estonia is, in contrast, more likely to contribute to the emergence of single, large stakeholders. While the paper will not go into details about the advantages and disadvantages of different privatization methods, it will nonetheless be important to bear in mind that the choice of a specific privatization method influences the structure of financial markets and the form of the corporate governance system.

2. Needed Institutional Infrastructure

Asymmetries in information and the resulting agency problems are a concern in both, debt and equity contracts. Hence, for either debt or equity holders to perform their control functions efficiently and to exercise their control rights, certain institutional structures must be present. Yet, reforming the institutional infrastructure of the transition economies is one of the most time consuming tasks to be achieved, and incomplete frameworks for the operations of financial intermediaries prevail (Table 1).

The enforcement of debt contracts is costly because lenders do generally not have a direct influence on management decisions during the term of a loan contract. Hence, assessing the quality of an investment project *ex ante* is of key importance. Active *ex ante* debt holder monitoring thus crucially depends on the availability of information on investment projects. In addition, active debt holder control is most likely to occur if one large debt holder exists and if the interests of creditors can be bundled. Hence, in the presence of a large number of small creditors of a firm, mechanisms should be designed that allow relatively large debt holders to take control, to coordinate creditor interests, and to implement a restructuring program. This also requires seniority issues to be clarified in order to improve incentives of creditors to foster restructuring.

Once a loan agreement has been signed, creditors have little control over the action of management. Only if debt contracts are sufficiently flexible can creditors affect borrower incentives by, for example, threatening not to prolong a loan. Adverse incentives on part of the borrower can also be mitigated by imposing bankruptcy penalties or collateral requirements on the borrowers, or by investing into monitoring activities. Passive debt holder monitoring is thus more

likely to occur if the legal framework for the provision of collateral is given and if information on the value of collateral can be obtained at low costs. This requires, above all, that property rights are clearly defined and enforceable through the legal system. These conditions, however, are often not fulfilled in the economies in transition. Here, the legal frameworks are weak, and markets for goods that can serve as collateral are neither deep nor liquid.

Table 1 — Monitoring under Debt and Equity Finance.

| | Equity finance | Debt finance |
|--------------------|---|---|
| Passive monitoring | <p>Entry and exit.</p> <p><i>Conditions:</i></p> <p>Deep and liquid equity markets; disclosure requirements; protection of minority shareholders' interests.</p> | <p>Collateral requirements.</p> <p><i>Conditions:</i></p> <p>Law of pledge; sufficiently deep and liquid markets for property and real estate; legal definition of property rights; availability of fixed assets; reliable accounting systems.</p> |
| Active monitoring | <p>Control through owners.</p> <p><i>Conditions:</i></p> <p>Corporate law that foresees strong ownership rights; large and active stakeholders with market-based incentives; disclosure requirements.</p> | <p>Evaluation of business plans (ex ante) and enterprise restructuring (ex post).</p> <p><i>Conditions:</i></p> <p>Presence of large debt holders with hard budget constraints and market-based incentives; reliable accounting systems; experienced loan administrators; flexibility of loan agreements; disclosure requirements; clear seniority rules.</p> |

Sources: Bear/Gray (1994); Dittus/Prowse (1994).

Because of the difficulties associated with the enforcement of debt contracts, Cho (1986, pp. 192) proposes to focus on the promotion of efficient stock markets over the course of financial development. Generally, active monitoring is indeed more likely under equity than under debt finance because owners may have inside information on the firm and because they have a greater influence on management action than debt holders do. In addition, owners should have incentives to engage into (risky) high-yield projects because they share the eventually high returns, thus promoting enterprise restructuring. Yet, if active large shareholders that can actually exercise these rights are not present, only passive moni-

toring may be possible. Passive monitoring through selling and buying shares, in turn, requires equity markets to be sufficiently deep and liquid. Furthermore, disclosure rules must be relatively rigid, allowing outsiders to gain sufficient insight into the quality of a firm's operations. However, because of the illiquidity of equity markets, a lack of experience with financial instruments, the weakness of regulatory bodies with enforcing disclosure rules as well as the poor state of their accounting systems, the countries in transition can hardly rely on security markets to perform passive monitoring (Dittus/Prowse, 1994).

Because of the problems with performing effective corporate governance under both, debt and equity finance, the Eastern European reform states should eliminate barriers to the functioning of each system. Improvements in the information systems and the creation of an appropriate legal framework support both, the potential for effective debt and equity holder control. In addition, since active monitoring in both cases rests on the presence of a dominant equity or debt holder, respectively, the rights of these groups should be clarified. Since debt finance dominated as a source of outside finance under central planning, it may be advisable to strengthen the rights of banks in this process.⁶ Chen, Weston, and Altman (1994) indeed suggest that banks can play a lead role in debt restructuring cases because of their ability to facilitate negotiations among creditors and because of the superior information on firms that they have.

In addition to their strong role as creditors of firms, banks may have an interest in providing debt contracts with equity-like components. Such a contingent transfer of rights benefits banks because moral hazard problems, which would put the entire invested capital at risk in the bad state of the world, can be mitigated.⁷ At the same time, banks receive a safe return in the good state of the world with-

⁶ In former Czechoslovakia, for example, firms financed 17-22 percent of their investment in the time period between 1980 and 1991 from bank loans. Yet, far more important have been internal sources of finance such as depreciation (45-60 percent) and retained earnings (16-25 percent) (Capek, 1994).

⁷ In a study on the German banking system, Harm (1992) found that the combined use of debt and equity-like components leads to such a contingent transfer of rights. In Germany, many debt contracts include authority provisions such as board seats, proxy votes, and equity ownership of banks in enterprises. Similarly, Japanese banks hold large equity stakes in enterprises and are highly involved in the financial affairs of companies coming under financial distress (Mayer/Alexander, 1990, p. 1). A more recent study (James, 1995) has also found that banks in the United States make substantial use of equity holdings in financially distressed firms even though commercial banks are under normal circumstances not entitled to hold enterprise shares.

out incurring the cost of monitoring. Enterprises eventually benefit from giving bankers a say in enterprise affairs because they need to dispose less collateral.

3. Universal versus Separated Banking

Both, the dominant role of banks as sources of outside finance as well as the benefits from designing debt contracts with equity-like components point at the potential merits of universal banking systems for Eastern Europe. In the already rather comprehensive literature on the benefits of different financial systems for the transition economies, universal banking is consequently typically attributed with quite a few positive features. A number of studies finds that universal banking should be preferred over a system which limits the role of banks to pure commercial banking activities (Corbett/Mayer, 1991; Frydman/Rapaczynski, 1994; van Wijnbergen, 1992, 1994; Walter/Smith, 1992).

Yet, only a few authors unequivocally advocate the introduction of a full-blown universal banking system. Steinherr and Gilibert (1994) argue instead that only privatized banks should operate as universal banks. Dittus and Prowse (1994) as well as Grosfeld (1994a, 1994b) acknowledge the benefits of a bank-based financial system but, at the same time, are skeptical about the applicability of a universal banking system in the present institutional setting in Eastern Europe. Thorne (1993) essentially advocates a specialized banking system, arguing that commercial banks cannot be expected to exert efficient direct or indirect control over enterprises at the early stages of the transition period. Rather, corporate governance should be the task of investment banks. In a similar vein, Rajan (1995) rejects the universal banking option for the emerging market economies. Phelps et al. (1992) are equally doubtful about the beneficial role of the existing banks in ensuring effective corporate control as well as about the role of stock market control. They propose outside control by other, newly emerging financial intermediaries.

Another group of authors opts for the adoption of a multi-tier banking system in which one group of banks (Steinherr/Gilibert, 1994; Szegö, 1994) or even all banks (McKinnon, 1991, 1992) would merely operate as narrow banks. Such narrow banks would only be allowed to collect deposits from the population and invest these funds into (safe) government securities. However, banks which invest into government securities only cannot utilize their potential informational advantage in assessing the quality of loan customers. Hence, an important competitive

advantage of commercial banks over other financial intermediaries remains unutilized in a narrow banking system.⁸

3.1. *Advantages of Universal Banking*

The major advantage of a universal, bank-based financial system – and thus the disadvantage of a system of specialized or narrow banks – is the improved utilization of economies of scale and scope in the provision of banking services (Clark, 1988; Saunders/Walter, 1992). Economies of scale imply that the average unit costs of a banking product decline as output increases. Economies of scope arise from complementarities in producing *different* financial services and from the shared use of fixed inputs which makes the joint production of financial services cheaper than their individual provision (Steinherr/Huveneers, 1990, p. 8). To a certain extent, all commercial banks are exploiting economies of scope because they simultaneously engage in the loan and in the deposit business. Hence, information that they obtain from monitoring firms' deposit accounts can be used to analyze the firms' cash flows and business conditions, thus reducing informational asymmetries (Nakamura, 1991, 1993). Also, the exploitation of economies of scale is not a unique advantage of universal banks.

As regards economies of scope, however, universal banks can potentially make use of a number of further synergy effects.⁹ The fact that universal banks are typically better informed about an enterprise's financial affairs as compared to pure investment banks may provide a certification effect for the underwriting business (Puri, 1995). According to this view, it would be less costly for firms to issue their securities through a universal bank rather than through an investment house. Furthermore, since the reputation that a bank has build up is an important asset, universal banks may benefit from offering different types of financial serv-

⁸ Van Wijnbergen (1994) argues that the savings banks may be run as narrow banks in the early stages of the transformation process. This does not seem to destroy information capital because most liabilities of the savings banks are household deposits. At the same time, the savings banks are important sources of liquidity for the interbank market. Yet, lending on these markets is also risky and would not be allowed under narrow banking. Hence, applying narrow banking to the savings banks would potentially lead to a process of financial disintermediation. See Abel/Skekely (1995) on special issues relating to the reform of the savings banks.

⁹ In addition to the effects listed here, universal banks may also benefit from being able to offer a wider range of products to customers thus better being able to meet customer demand and from the joint marketing of their products (Saunders/Walter, 1994, p. 230).

ices, provided that the acquisition of information on the quality of a bank is less costly for certain types of operations (Rajan, 1995, p. 290).¹⁰

Even more importantly, universal banks utilize economies of scope between different types of financing and may thus provide a solution to the corporate control problem of firms. The dual role of universal banks as debt and equity holders allows them to impose an optimal control structure on firms.

The theory of optimal corporate control implies that control should shift from equity holders to debt holders in bad states of the world, i.e. at the lower tail of the distribution of project returns, in order to maximize the value of the firm.¹¹ This can be shown in a two-period model in which debt and equity holders are imperfectly informed about the actions of the firm's management. At the beginning of the first period, control rights are allocated between debt and equity holders conditional upon a signal that is being observed at the end of this period and which allows an assessment of managerial effort. In addition, the initial balance sheet structure is determined. In the first period, management chooses an effort level, and noisy signals about this effort level are observed by the stakeholders. They choose either to let the management continue its operations in the second period or to discontinue activities and to reorganize the firm. If the signal of first-period performance is below a threshold level, discontinuation of management activities is optimal. The corresponding optimal incentive scheme of stakeholders can be implemented by granting control rights to debt holders in bad states of the world. Because their returns decline with the amount of risk that management assumes (concave returns), debt holders have an incentive to opt for tough intervention policies towards management. Conversely, equity holders which have convex return streams should be granted control rights in good states of the world which implies little interference with management action.

The potentially beneficial role of universal banks in the transition economies thus arises because these banks can be active shareholders during good

¹⁰ In a rather general framework, Canals (1995) shows that the coordination of several activities in one bank is superior to the separate provision of these services if the combined profits exceed the coordination costs plus the additional expenses from performing the activities independently. Yet, Canals fails to model the specific feature of universal banking, i.e. the synergies derived from offering both, debt and equity contracts.

¹¹ Dewatripont and Tirole (1993, 1994) show that this mechanism holds for the optimal corporate control of a bank. Yet, the essence of the argument applies also to a non-financial firm.

times and active debt holders during bad times (Steinherr/Gilbert, 1994, p. 103). In this context, two control problems must be distinguished. On the one hand, dispersed holdings of shares may prevent equity owners to bundle their interests and to exercise active ownership control. In this situation, banks which hold a relative small equity stake may assume the role of active owners. On the other hand, a lack of information on the enterprise affairs and/or a lack of intervention mechanisms may prevent non-bank debt holders from intervening in the enterprise's affairs in bad times. Banks as debt and equity holders may not face these problems and can thus also behave as active debt holders.

The role of universal banks in reducing informational asymmetries and agency costs furthermore assigns them a role as sources of long-term finance as well as in the active restructuring of firms. Long-term contracts that are fully time-consistent and that do not incorporate incentives to diverge from *ex ante* determined specifications when payments fall due are hardly enforceable in the reform countries. Weak legal systems and great uncertainty over future developments prevent such contracts from being concluded.¹² In this situation, longer-term contracts can be facilitated through mainbank relationships, where (i) banks have a dominant share in the credits of an enterprise and are being the first consultants to the enterprise in all financial affairs, (ii) close relationships between banks and enterprises exist, and (iii) banks have incentives to restructure the enterprise (Fischer, 1990, p. 3). While mainbank relationships can, in principle, also evolve in specialized banking systems, they are yet more likely to emerge in a universal banking system where banks may hold equity stakes in firms. Hence, universal banks can be an important source of long-term finance which is urgently needed to reconfigure the capital stock in the transition economies. The fact that banks are the largest debt holders in many firms and that they have informational advantages with respect to their existing clients is underlying the argument by van Wijnbergen (1994) that banks should be closely involved in the process of enterprise restructuring.¹³ During such a restructuring process, banks should also be

¹² In fact, most bank lending in Eastern Europe is done on a short- to mid-term basis. At the end of 1994, the share of long-term lending in total loans was only 21.6 percent in Hungary, followed by the Czech Republic (29.2 percent), and Poland (36.3 percent) (Buch, 1996).

¹³ Bear and Gray (1994, p. 11) take a different view regarding the information that banks have on their traditional clients. They argue that the poor state of the accounting systems in Eastern Europe does not allow an evaluation even of the existing firms. Yet, this argument neglects that the relevant information set contains elements other than accounting data. On further components such as the organiza-

allowed to swap old debt into equity in order to create incentives for this involvement.¹⁴

Implementing universal banking systems can furthermore contribute to increased competition in the domestic banking system, in particular regarding the market entry of foreign banks. In view of the global trend towards a liberalization of financial markets and the introduction of universal banking, it hardly seems conceivable that the Eastern European economies could choose to entirely restrict universal banking activities. Such restrictions would have negative implications for the market entry of foreign banks which are likely to prefer to offer the same range of financial services to their clients abroad that they can offer in their home countries.

3.2. Risks of Universal Banking

The advantages of a universal banking system in providing a solution to the corporate control problem of firms and in helping to restructure firms must be weighted against its potential risks and disadvantages. First of all, universal banking entails risks for the stability of the financial systems.¹⁵ Universal banks can be debt and equity holders of an enterprise at the same time. The resulting increased exposure to systematic risks may not be reflected adequately in traditional risk measures which disregard correlations between the rates of returns of different assets (Steinherr/Gilbert, 1994). This argument receives additional weight in view of the fact that deposit insurance schemes in the countries under review have during most of the reform process taken the form of implicit state guarantees. Only recently has deposit insurance been put on a more explicit basis, yet failing to account for banking risks in the calculation of insurance premia and leaving major state-owned banks under the umbrella of full government protection (Buch, 1996). Hence, the negative impact that moral hazard has on the safety

tional structure and potential competitive advantages of firms, banks may well have superior information as compared to other agents.

¹⁴ Yet, equity holdings of banks in firms are not a necessary condition for bank-led loan work-outs. Loan work-outs by commercial banks will also occur if banks can impose a bankruptcy threat on firms (Nakamura, 1989).

¹⁵ It could also be conceivable that universal banks are *less* risky than specialized banks because of benefits that they can derive from assembling more diversified portfolios (Saunders/Walter, 1994, pp. 230). Yet, using the above argument on economies of scope between debt and equity contracts *in one firm* as the underlying rationale for universal banking activities, risk concentration is likely to be higher in universal than in specialized banks.

net of the banking system may even be exacerbated under universal banking (Saunders/Walter, 1994).

In addition, universal banks are exposed to substantial conflicts of interest that arise from simultaneously taking deposits from non-commercial customers, from granting credit to, and being equity owners of an enterprise. As board members of enterprises, bankers obtain insider information on planned investment projects and on other relevant business decisions. There are several ways of exploiting this insider information to the disadvantage of the bank's depositors. The bank may, for example, decide to invest deposits into enterprise shares even though depositors may prefer safer investments. In order to maintain the value of their existing shareholdings, banks may also grant new loans to troubled firms, adding an additional layer to the distress lending phenomenon.¹⁶ Incidentally, the fear that universal banks may fool investors by selling shares of firms which could not service their debt was one main justification for the Glass-Steagall Act of 1933 which prohibits universal banking in the United States (Rajan, 1995). Following such a strategy, the bank could use the sales proceeds to recover the lost loan. Of course, such a strategy can only be rational if the bank has a comparatively short time horizon which, in any case, is not an unreasonable assumption in the Eastern European setting.

In order to prevent such conflicts of interest from occurring, it is therefore essential to maintain clear institutionalized divisions between investment and commercial banking activities.¹⁷ Choosing a subsidiary form of a universal banking system would have the additional advantage of easing the supervision of banks as well as the calculation of deposit insurance premia since risks could be separated (Saunders/Walter, 1994, pp. 234). Yet, in the Eastern European setting where trained personnel is scarce and where reputational mechanisms are yet fragile, such division rules are even more likely to be ignored than in developed market economies. Furthermore, the system must still be flexible enough as to allow an exchange of information between the departments such that economies of scope can actually be utilized. All this requires a comparatively complex and efficient internal organizational structure of the banks which, again, may not be realized in Eastern Europe.

¹⁶ See Perotti (1993) for a discussion of the distress lending phenomenon under pure debt contracts.

¹⁷ One way to promote the maintenance of such fire walls is to adopt a British-type of universal banking system where the investment and commercial banking departments are separately incorporated (Steinherr/Huvencuers, 1994, p. 273).

In addition, the argument that universal banks can contribute to the evolution of beneficial mainbank relationships must be substantially modified for the situation of the Eastern European reform countries. In the immediate aftermath of banking system reform when banking regulations were weak and could hardly be enforced, a large number of new banks has been licensed. Many of these banks were founded by firms which hoped to obtain low-interest loans from the banks. Substantial interlocking ownership of banks and enterprises has been the result. These close relations between banks and enterprises are certainly not of the type needed to allow for efficient long-term commitments. In fact, Bennett (1995) points out that allowing enterprises to control banks would be the wrong way to introduce universal banking. Hence, such inefficient „mainbank” relationships should be exposed to substantial competitive pressure. Banks which are merely the finance departments of large enterprises and which do not comply with prudential regulations must be exposed to a bankruptcy threat. Universal banking may also entail the risk of new, inefficient mainbank relationships to emerge (Rajan, 1995) because it makes firms dependent on their „Hausbank” as the main source of finance. This risk is a particular concern in the emerging market economies because of the lack of competition in financial markets. Hence, market entry into the banking industry should be rather liberal in order to provide firms with a wide range of choices for their banking relations. This holds especially with respect to the market entry of more efficient, foreign banks

The potential for bad mainbank relationships to evolve in Eastern Europe points at another risk that is inherent to universal banking in these economies. While universal banking may solve the agency problems of firms, corporate control issues within banks remain unresolved.¹⁸ Yet, neither the successor banks of the monobank nor many newly founded private banks can a priori be expected to operate as profit maximizing lending institutions due to their close ties to political circles and enterprises, respectively. Hence, imposing an corporate control on (universal) banks is of key importance. Only if this goal is achieved can universal banks be expected to contribute to a more efficient allocation and utilization of financial resources.

¹⁸ See Udell/Wachtel (1995) for an analysis of the variety of principal agent relationships which can be observed in a banking firm.

Ultimately, the privatization of banks will contribute to the improved corporate governance of banks.¹⁹ This holds in particular to the extent that privatization contributes to the emergence of a dominant shareholder such as a foreign bank. Since the privatization of banks is typically postponed in the transition economies,²⁰ the government must assume certain control functions in the yet state-owned banks. Setting a clear time table for the privatization of banks and enhancing the incentives of bank managers to successfully prepare the banks for privatization can ameliorate the behavior of banks in the pre-privatization phase. The incentives of bankers can, for example, be improved through the commercialization of banks, the establishment of supervisory boards, and the issuance of stock options to be exercised by bank management upon privatization.

In addition, because the privatization of banks may not even be a sufficient condition for changing management incentives (van Wijnbergen, 1994), banking supervision should have been sufficiently tightened prior to privatization. Otherwise, risky lending and the eventual insolvency of banks may put pressure on the government to bail-out privatized banks, thus seriously undermining its credibility not to grant subsidies to the private sector.²¹ Upon strengthening banking supervision, deposit insurance should furthermore be put on an explicit basis. While a fully privately run deposit insurance system may hardly be credible in view of the inherited system of full state guarantees for the state-owned banks, clear participation rules for such a system should be established, and state guarantees should increasingly be withdrawn. This implies that only a certain minimum amount of deposits should be insured, that only banks which fulfill minimum standards of prudence and solvency should be granted access to a deposit insurance system, and that whenever possible deposit insurance fees should be linked to the riskiness of the underlying assets.²²

¹⁹ Of course, also private owners of a bank have to ensure that the interests of managers are aligned with their own goals. In this context, see John/Saunders/Senbet (1995) for a discussion of optimal incentive schemes for bank managers.

²⁰ While the Czech Republic has moved earliest in this context by including the major state-owned banks in the voucher privatization scheme, the state retains substantial control rights (see also Table 8, Appendix). It is the intention of the Czech government to sell these shares to strategic investors. Poland and Hungary, instead, rely on the direct sales method for the privatization of their banks. Yet, delays in the implementation of bank recapitalization programs have substantially held back the privatization of the banks in these countries (Buch, 1996). See Bonin (1995) for an overview of bank privatization strategies in Eastern Europe.

²¹ See Buch (1994) for an analysis of policies to deal with the bad debt problem.

²² See Saunders and Walter (1995) for an overview of issues relating to the regulation of universal banks.

Leaving the problem of imposing an effective system of corporate control on universal banks aside, Dittus and Prowse (1994, p. 14) as well as Grosfeld (1994a, p. 4) argue furthermore that universal banks may not be suited to restructure enterprises efficiently and to prepare firms for operations in new markets. They claim that a bank-based financial system works best in industries where standard operating procedures and skills must be evaluated. Market-based financial systems, in contrast, have comparative advantages in evaluating new and risky industries. A bank-based system which introduces strong links between banks and enterprises in Eastern Europe may thus hinder competition and may fail to give firms incentives to search for new investment opportunities. Yet, this argument does not provide a justification for an outright prohibition of universal banking operations. First, it is not evident which type of decisions would actually be more relevant for the transition economies. While some product innovation will certainly have to take place, substantial room for adjustments in the standard operations of firms also remains. Second, instead of prohibiting universal banking operations, the implementation of flexible regulatory systems which allow the access of firms to a wide array of financial instruments seems a more promising strategy to adopt. While new, risky firms may obtain their financing through venture capital funds or through retained earnings, better established firms may find it less costly to obtain bank loans.

3.3. Conclusions

The main conclusion that can be drawn from the above discussion is that the introduction of a universal banking system benefits the transition economies because it can promote the provision of long-term finance, because it reduces problems of corporate control in firms, and because it may create large stakeholders which have an incentive to restructure firms. Yet, the risks of a universal banking system must be considered as well. These risks primarily stem from the fact that incentive systems within banks are still rather weak. Bank privatization, the strengthening of banking supervision, and the abolition of implicit deposit insurance systems can improve bank performance. Eventually, the emerging market economies can also exploit positive spill-over effects between bank-based and market-based financial structures because the evolution of stock markets may contribute to the needed corporate governance mechanisms for banks. Hence, there is a possible trade-off between stock market development and the evolution of an efficient (universal) banking system (Phelps et al., 1992).

Currently, the economies in transition are lacking important pieces of the infrastructure needed for the effective implementation of a bank-based as well as of a market-based financial system. Hence, the main task of the reformers is to create an institutional framework that (i) does not hamper the evolution of either system, depending on the needs of the economy and on the privatization method that has been chosen, and that (ii) introduces safeguards against the misuse of any system. The first requirement implies that the creation of a strong legal background for the operation of financial markets as well as of reliable information systems should be assigned high priority already at the beginning of the transformation process. In other words, the mere withdrawal of the state from the control of state-owned banks and the evolution of any kind of financial market structure from scratch is unlikely to yield optimal results (Frydman/Rapaczynski, 1994, p. 57). Instead, the state has a role to play in setting the determinants of the institutional frameworks of financial markets while it should not interfere with the actual decision making processes within banks.

Commercial banks in transition economies should generally be allowed to perform investment banking activities and to hold limited amounts of equity in firms. Incidentally, not the actual amount of equity that banks hold in firms is decisive but the fact that they do hold shares and thus represent shareholders' interests (Saunders, 1994, p. 238). At the same time, a proper regulation of banks and the maintenance of the stability of the banks' safety net require that (i) threshold levels and full provisioning requirements for equity holdings must be introduced, that (ii) banks are being monitored by a supervisory agency, and that (iii) they are being exposed to effective systems of corporate governance and control. As long as basic compliance with these requirements cannot be ensured and if automatic deposit insurance is still in place, equity holdings of banks in enterprises should be strictly limited and may even be forbidden.²³ This holds in particular for the large, state-owned banks as long as these are subjected to substantial influence from the political arena.

As regards the reforms that are needed in order to ensure an improved flow of funds to new, private enterprises, universal banking operations in the sense defined above are not necessarily required.²⁴ Instead, institutional reforms which

²³ Note that this restriction does not apply to other investment banking activities.

²⁴ In the long-run, however, universal banking may benefit even the newly emerging firms because universal banks have the potential to accompany enterprises through all stages of financing, including the issuance of equity shares at later stages of the

allow for an improved performance of banks in their traditional lending activities are needed. These reforms comprise the enhancement of the legal framework for the provision of collateral, the clarification of ownership rights as well as improvements in information and accounting systems. State-owned investment banks as well as government guarantees for loans to small enterprises may appear as another solution to the problem that positive effects of lending to small firms may not be taken into consideration by competitive private banks. Yet, for such institutional arrangements to be successful, substantial credibility of the government not to base lending decisions on political considerations, and to implement proper credit screening mechanisms is needed. Since these conditions are hardly met in the transition economies, preferential loan facilities should only be envisaged if foreign-based financial institutions can be involved in such programs.

4. Evidence from Developed and Developing Countries

The experience of developed and developing countries can provide useful insights into the likely effects that financial sector reforms in Eastern Europe may have. These data show, first of all, that new equity issues play a comparatively small role in the financing of enterprises in established market economies (Table 2) (Stiglitz, 1991, 1992; Mayer, 1987). In Germany, for example, enterprises received only 8.2 percent of their new financing from new equity issues in the 1982-1988 period. Instead, retained earnings accounted for the bulk of finance (89.6 percent). In the United Kingdom, new equity has been somewhat more important (14.3 percent) while retained earnings accounted for 58.2 percent of the financial funds of firms. Here, debt finance (27.3 percent) and in particular trade credit (18.5 percent) were far more important than in Germany. Long-range time series for the United States show a declining reliance on equity finance and an increased role of debt finance in the post-war period. Interestingly, the issuance of new shares, which in the first half of the century accounted for 15 percent of new finance, was only of small importance for the financing of firms in the United States in the post-war period (Singh/Hamid, 1992, p. 10).

firm's life cycle. Yet, this potential advantage of universal banks is not necessarily a factor behind the initial access to external funding in Eastern Europe.

Table 2 — *The Financing of Firms in Selected Economies.*

| | <i>Equity finance</i> | | | <i>Debt finance</i> | | |
|--|-----------------------|-------------------|------------|---------------------|-------------|--------------|
| | Total | Retained earnings | New equity | Total | Bank credit | Trade credit |
| Germany | 97.8 | 89.6 | 8.2 | 2.2 | -1.1 | 3.3 |
| UK | 72.5 | 58.2 | 14.3 | 27.3 | 8.8 | 18.5 |
| USA | | | | | | |
| 1970-79 | 55.0 | 52.0 | 3.0 | 45.0 | ... | ... |
| 1960-69 | 64.0 | 62.0 | 2.0 | 36.0 | ... | ... |
| 1946-59 | 69.0 | 64.0 | 5.0 | 30.0 | ... | ... |
| Korea | 53.1 | 12.8 | 40.3 | 45.4 | ... | ... |
| Mexico | 93.1 | 17.1 | 76.0 | 2.9 | ... | ... |
| Turkey | 78.6 | 18.1 | 60.5 | 15.5 | ... | ... |
| <i>Germany and UK: 1982-1988 averages; Korea: 1980-1987; Mexico: 1984-1988. Turkey: 1982-1987.</i> | | | | | | |

Sources: Mayer/Alexander (1990, p. 10); Singh/Hamid (1992, p. 11, p. 44).

Singh and Hamid furthermore collected data on the financial structure of firms in developing countries in the 1980s. The most important difference between the financing patterns of these and of developed countries is the high share of new equity, ranging from 40.3 percent in Korea to 76.0 percent in Mexico. Retained earnings, in contrast, play a comparatively small role while the share of debt finance varies across countries. It will thus be interesting to see whether the financial structure of firms in transition economies follows the pattern of developed market economies or rather those of the recent history of less developed countries.

Yet, even if the financial structure of firms in the emerging market economies would converge to a pattern similar to that observed in developed market economies, this does not necessarily imply similar efficiency in the allocation of financial resources. Heavy reliance on internally generated funds in the absence of product market competition and of a lack of efficient managers may well imply continued resource misallocation (EBRD, 1995, p. 92). The promotion of access to external finance – together with the implied improvements in the corporate governance of firms – as well as enhanced product market competition are thus means to facilitate a better allocation of resources.

As regards the performance of different types of financial systems, a comprehensive review of the literature would certainly be beyond the scope of this

paper. Recently, Prowse (1995) has provided an overview of corporate control mechanisms in Germany, Japan, the United States, and the United Kingdom. He finds that the system of corporate control that evolves in a particular country is strongly influenced by the regulatory and legal structure of that economy. This structure, in turn, is determined through regulations for insider trading, for financial disclosure, and through the corporate law which has an impact on the possibilities of firms to raise outside finance. The main result of his survey is that the German and the Japanese financial systems allow banks to perform control functions in enterprises at relatively low costs while at the same time firms have only limited options to raise non-bank debt finance.²⁵ The financial systems of the United States and the United Kingdom, in contrast, prevent banks from controlling firms in normal times through equity holdings while relying more on (costly) takeovers to control firms. In essence, the main conclusion Prowse draws (p. 55) is that each of these countries would benefit from allowing market forces to play a greater role in the corporate governance of firms. Hence, his findings confirm the conclusion that had tentatively been suggested above, namely that the transition economies should eliminate regulatory barriers to the functioning of either system of corporate control and instead let an optimal financial structure emerge endogenously while, at the same time, controlling for risks that certain structures would imply.

Furthermore, a number of studies has sought to analyze the relevance of economies of scale and scope in banking.²⁶ Thus far, the evidence is still inconclusive with respect to the existence of economies of scale in banking (Saunders, 1994, pp. 232). Steinherr (1995) analyzes the profitability of 88 banks in 18 countries over the 1985/86-1990 period. He concludes that universal banks tend to achieve a better risk-return trade-off than specialized banks which he explains with a possible positive correlation between the size of a bank and its monitoring capacities as well as with the informational advantage of universal banks. He, however, fails to detect significant economies of scale or scope in the banks studied. Yet, Hughes et al. (1995) point out that the inability of empirical studies to detect economies of scale may be due to the fact that these models assume risk neutrality on part of bank management. Hence, cost advantages that result from

²⁵ A reference needs to be made in this context to the study of Edwards and Fischer (1994) who find – due to a lack of micro-data – little solid evidence for the notion that proxy votings of German universal banks as well as the board membership of bankers have significant influence on the corporate governance of large German firms.

²⁶ Berger, Hunter, and Timme (1993) give an overview of the empirical evidence.

an improved control of risk as the bank increases in size are not considered in these models. By allowing for risk aversion of bank management, Hughes et al. find that economies of scale exist, and that these increase with the size of the banking firm.

As regards the evidence on the existence of economies of scope in banking, reliable results are even more difficult to obtain (Rajan, 1995, p. 291). This holds in particular because an empirical investigation into the ability of universal banks to solve agency problems would require the availability of microeconomic evidence on loan contract terms, corporate control structures, the duration of creditor relations, and on loan restructuring cases. Furthermore, such data should be comparable across countries in order to allow for comparisons of different corporate control structures. Generally, Berger, Hancock, and Humphrey (1993) find that the joint production of banking products creates some economies of scope. Saunders and Walter (1994) perform cost functions tests for the period 1981-1986, finding – if anything – (cost) diseconomies of scope between interest and non-interest earning financial services. They explain this result with the heavy investment that banks have made during this period into expanding their range of services (p. 81). It thus remains to be seen whether these investments will eventually lead to the exploitation of positive economies of scope later on.

With respect to the potential informational advantage that universal banks have over other financial intermediaries in being creditors and security underwriters of a firm at the same time, two recent studies have analyzed the pre-Glass-Steagall experience of the United States. Puri (1995) finds that bank-underwritten securities generated higher prices than similar investment banking underwritings, thus reflecting lower *ex ante* risk. This dominance of a certification effect over conflicts of interest as perceived by investors is particularly pronounced for information-sensitive and junior securities. Hence, banks may actually be utilizing economies of scope in this market segment. Kroszner and Rajan (1994) perform an *ex post* analysis of security returns. According to their study for the years 1921-1929, bank affiliates typically underwrote better performing securities than specialized investment banks. Again, this finding points at the utilization of economies of scope through universal banks.

Not only the emergence of more efficient systems of corporate governance but also the provision of outside finance to new, private firms is a key goal of reforms. While better corporate governance systems may be facilitated through universal banking-type institutional structures, lending to new, private firms does not

require universal banking to be permitted. While close creditor-debtor relations are certainly promoting private enterprise financing, these must not necessarily be facilitated through ownership stakes of banks in firms. Berger and Udell (1994b) rather find that access to bank lending for private firms is a function of the size of the banks. While the administration of a large number of small enterprise accounts may be associated with managerial diseconomies for large banks, small banks often fill this market niche. In a related paper (Berger/Udell, 1994a), the authors find that borrowers with a longer-term business relationship with a bank tend to pay lower interest rates and to pledge less collateral than those borrowers which do not have these well-established contacts. Incidentally, this analysis supports the argument by Fischer (1990) that the evolution of mainbank relationships can have positive implications for firms' access to external finance.

IV. EMPIRICAL EVIDENCE FROM EASTERN EUROPE²⁷

The discussion so far has shown that banks are likely to play an important role in the financing of new, private enterprises as well as in providing a solution to the corporate control problem for large, state-owned firms during the privatization process. Universal banks have comparative advantages over specialized financial institutions in performing particularly the latter task. Yet, enhancing the efficiency of the financial systems in the transition economies is not only a function of the ability of banks to operate as universal banks. Instead, important legal and institutional reforms are needed in order to promote a more efficient allocation of financial resources. This chapter proceeds by analyzing the potential and actual involvement of banks in Eastern Europe in enterprise restructuring, the legal framework for the access to outside finance for firms, and it presents indicators of financial markets structures.

1. The Relationship of Banks and Firms

All three countries under review have already opted for some form of universal banking system. Yet, the different roles that are being assigned to banks and the channels through which banks may get engaged in the process of enterprise restructuring are far from being uniform.²⁸

²⁷ All legal regulations that this chapter refers to are summarized in Table 8 (Appendix).

²⁸ The information that will be presented in the following has been taken from the "Act on Banks" for the Czech Republic (SBC, 1992; Trade Links, 1995a, 1995b),

1.1. *Universal Banking*

In the Czech Republic, banks can generally perform commercial and investment banking activities at the same time. Yet, banks' equity holdings in enterprises are restricted. These holdings need to be notified and approved by the Czech National Bank if they exceed 10 percent of the firm's capital or if the sum of all equity holdings exceeds 25 percent of the bank's capital. Temporary holdings of equity may be higher, and the limitations do not apply to those equity stakes which were acquired through debt-to-equity swaps or to equity stakes which are held on behalf of third parties.²⁹ Through debt-to-equity swaps, the Consolidation Bank which was founded in 1991 to take over presumably non-performing loans from the commercial banks could actually acquire substantial ownership stakes in enterprises (Brom/Orenstein, 1994).³⁰ Overall, equity participations still represent only a modest fraction of the assets of Czech banks, although their importance increased only between January and December 1994 from 0.4 to 1.2 percent of total assets (CNB, 1995).³¹

As in the Czech case, Polish banks can perform commercial and investment banking activities at the same time, and non-bank financial institutions can engage in commercial banking activities upon approval of the National Bank. Generally, banks cannot hold more than 25 percent of their assets in shares within one company. Yet, holdings of up to 50 percent are permissible upon approval of the National Bank.

In Hungary, bank involvement in the process of enterprise restructuring has been less favorably treated by regulations than in the Czech Republic and in Poland. Commercial banks have to set up fully-owned affiliates in order to perform investment banking activities, and debt restructuring through banks has until re-

from the "Act on Financial Institutions" for Hungary (SBS, 1994), and from the "Banking Act" of 1989, amended in 1992 (NBP, 1989; Kostro, 1992) for Poland. See also Table 8 in the Appendix.

- 29 Bonds which were issued to increase the capital of banks in the context of the bank recapitalization of 1991 carry no interest coupons but are to be swapped into shares in privatized companies after five years (IMF, 1994, p. 131).
- 30 Currently, the bank occupies about 11 percent of the loan market in the Czech Republic (Buch, 1996).
- 31 This value is actually not too far away from the share of equity and participations in the German banking system. Here, this asset item accounted for about 1.9 percent of assets between 1983 and 1992, while displaying an increasing trend over the sample period (OECD, 1994b).

cently not been encouraged. Besides the organizational separation between investment and commercial banking activities, some large exposure limitations exist. First, loans cannot be provided for obtaining ownership stakes in an enterprise if the bank has influential participations in that firm.³² Second, commercial banks cannot hold more than 15 percent of their capital in stakes in one enterprise; a 40 percent limit on these holdings applies to investment banks. Third, the sum of ownership stakes in enterprises cannot exceed 60 percent of the bank's capital but shareholdings from debt-to-equity swaps are unlimited for 6 months (3 years if acquired in conciliation agreements) (Bonin/Schaffer, 1994, p. 23). Yet, holdings of shares and of other share-like securities have thus far remained of minor importance. In relation to the total assets of the Hungarian banking system, shareholdings increased from 0.08 to 0.29 percent between 1991 and 1993. Also in relation to loans to customers, shareholdings do not reach more than 1 percent.³³ As the EBRD notes (1995, p. 131), banks and investment funds in Hungary do thus not play a role as outside owners of firms.

One way to measure the importance of investment banking activities in the operations of commercial banks is to look at the share of non-interest income in total income or relative to total assets. Yet, evidence from developed countries shows that this measure by itself cannot be taken as a clear indicator of the importance of universal banking activities. In the United States with its separated banking system, for example, non-interest income accounted for about 30.8 percent of total income of commercial banks in the 1983-1992 period while it contributed virtually the same amount (30.4 percent) to the income of German (universal) banks (OECD, 1994b).

Table 3 reveals that non-interest income has followed a quite unstable pattern in the Czech Republic and in Hungary while it doubled in importance between 1991 and 1992 in Poland. Here, it retained a constant share afterwards. Incidentally, the share of non-interest income in total income was similar in 1994 in Hungary and in Poland as in Germany or in the United States with roughly 25-30 percent while it was only half as important in the Czech Republic (11.9 percent). Yet, these data are potentially misleading for two reasons. First, accounting standards in Eastern Europe underwent substantial changes during the

³² Influential participation is being defined as direct or indirect ownership exceeding 10 percent of the voting rights *or* as the bank having significant influence on the firm's business decision.

³³ These numbers were calculated on the basis of internal documents of the Kiel Institute of World Economics.

sample period. Hence, comparability of the data over time is most likely not ensured. Second, only net data are being reported. In view of the substantial investments into the banking infrastructure that are needed in Eastern Europe and that show up as non-interest expenses, gross income and revenue data as well as a further disaggregation of the data would be needed in order to assess the expansion of banks into investment banking activities.

Table 3 — Importance of Net Non-Interest Income in Eastern European Banks, 1991-1994.

| | 1991 | 1992 | 1993 | 1994 |
|---|-------------------------------------|------|------|------|
| | <i>(in percent of total income)</i> | | | |
| Czech Republic ^a | 21.8 | 15.9 | 29.0 | 11.9 |
| Hungary | 31.2 | 41.5 | 20.4 | 25.6 |
| Poland | 15.8 | 32.2 | 32.6 | 32.6 |
| | <i>(in percent of total assets)</i> | | | |
| Czech Republic ^a | 0.9 | 0.7 | 1.9 | 0.6 |
| Hungary | 2.2 | 2.6 | 1.3 | 2.1 |
| Poland | 1.7 | 2.5 | 2.0 | 3.1 |
| a) 1991-1993: 6 largest banks (excluding the Consolidation Bank); 1994: all banks, holding 70 percent of all assets at the end of 1993. | | | | |

Sources: Various annual reports of Czech commercial banks and of the CNB; Golajewska/Wyczanski (1994), Wyczanski (1995); unpublished material of the National Bank of Hungary.

1.2. Bank Involvement in Enterprise Restructuring

When assessing the role of banks in enterprise restructuring, one must, first of all, note that evidence on restructuring activities is generally scarce. The European Bank for Reconstruction and Development (EBRD, 1995, p. 128) reports evidence from unpublished enterprise surveys which sheds some light on these issues. Thus far, restructuring tends to have taken place in all firms, regardless of ownership structure as a response to a hardening of budget constraints. If anything, active restructuring appears to have taken place primarily in firms with a foreign outside owner and, to a somewhat lesser extent, in bank – or investment fund – controlled firms. As regards the firms that have been privatized already, no statistically significant changes in adjustment patterns can be identified as yet. At the same time, these findings imply that countries benefit from reforms which as-

sign a potentially important role to individual institutions or investors to perform governance functions.

Czech Republic

One example for such a strategy is the Czech Republic. In addition to equity stakes that banks directly hold in enterprises, the involvement of Czech banks in the creation of investment funds has led to control of banks over firms. In the context of the Czech voucher privatization program, each adult received a booklet with voucher points which he could use to bid for shares of enterprises. Since 1992, investment funds have emerged which collected the voucher points and invested these into firms (Graph 1) (Brom/Orenstein, 1994, p. 904). Through their ownership of investment companies,³⁴ banks have set up their own investment funds. The original voucher owners become owners of the privatization funds but have in fact little control over the investment companies which run the funds (Frensch, 1994, p. 46). Although over 300 investment companies were originally founded, only about 50 of them play a significant role in the corporate governance of firms through their board membership in privatized firms. Furthermore, 7 out of the largest 10 investment funds are owned and controlled by banks (Bonini, 1995, p. 40).

Contrary to earlier fears, mass privatization in the Czech Republic has not led to widespread dispersed ownership structures. Instead, in the first privatization round, investment funds acquired 66.2 percent of the total book value of Czech enterprises, and 75 percent of the privatized firms had concentrated ownership of investment funds of at least 30 percent (Matesova/Seda, 1994, p. 39, p. 50). Because bank-controlled investment funds collected about 60 percent of the voucher points of all investment funds in the first privatization wave – this share having gone down somewhat in the second wave (Mejstrik, 1994, p. 21) – banks thus potentially play an important role in the corporate governance of firms.³⁵

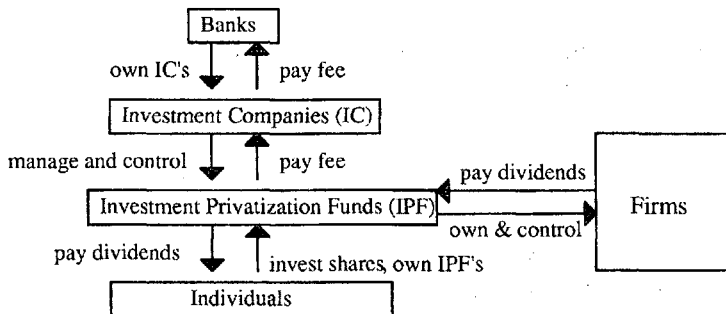
The success of banks with collecting voucher points is primarily due to the fact that they had a branch network at hand, that they could cover advertising

³⁴ Since the second wave of the voucher privatization program, the funds can manage themselves and need not necessarily have an investment company.

³⁵ Furthermore, the government has retained a large potential governance role in banks and enterprises through the board seats held by its National Property Fund (Brom/Orenstein, 1994).

costs of the funds, and that they had a fairly good reputation for soundness and reliability (Coffee, 1994, p.12). To what extent banks use their power to improve the performance of Czech enterprises and thus to contribute to the success of the privatization process cannot be evaluated finally. Generally, IPFs tend to have maintained their liquidity, adopted a long-term view of the enterprises' affairs, and are being engaged in firm restructuring (Brom/Orenstein, 1994).³⁶ Also, IPFs tend to gain effective control in the enterprises in which they invest (EBRD, 1995, p. 130). Yet, bank- and non-bank controlled IPFs may still behave differently. One further piece of evidence that is thus far available is that non-bank controlled, private investment funds have assembled more concentrated portfolios, allowing them to retain greater control rights while bank-controlled funds have more dispersed portfolios (Coffee, 1994, p. 4). This dispersion of shares would tend to reduce the potential impact of banks on firms. Generally, the share holdings of the funds (or of a group of funds) in one firm are restricted to a maximum of 20 percent of the shares of the firm and/or to a maximum of 10 percent of the capital of the fund. These restrictions tend to limit the effective control that investment funds can have over enterprises.

Graph 1 — Structure of the Czech Investment Funds.



Generally, Czech banks have financial incentives to exercise effective control rights in firms, because they earn the fees from the privatization funds (Edwards, 1994, p. 30). In addition, Czech banks send representatives to the executive and supervisory boards of firms. The funds are thus similar to core investors. Furthermore, bank-owned investment funds may be less liquidity con-

³⁶ However, restructuring efforts appear not to be of much difference in IPF-controlled firms as opposed to other outsider-controlled enterprises (EBRD, 1995, p. 133).

straint than independent investment funds because they can, at least for a certain period of time, cross-subsidize losses of the funds through other banking profits. According to this view, banks would thus take a more long-term view of the enterprise's affairs rather than maximizing short-run cash flow (Brom/Orenstein, 1994, p. 913).

However, the role of Czech banks in the effective control of firms is limited to the extent that qualified personnel is scarce and that conflicts of interest arise between the investment fund management and the commercial banking operations. Often, bank managers are sent to fill board seats. These managers have incentives to recover as much as possible for their loan business – and thus to charge high interest rates – rather than to opt for high dividends or for profits to be reinvested (Matesova/Seda, 1994, p. 19). Coffee (1994, pp. 32) provides mixed evidence with regard to the exchange of information between the commercial and investment banking activities. While some banks actively exchange information between these departments, others have established fire walls, trying to evade possible conflicts of interest. Czech banks can in principle be required also by law to establish Chinese walls between their investment and commercial banking activities, but such requirements seem to be difficult to implement. A further potential hindrance to the efficiency of bank control is the degree of cross-ownership in the banking system through investment funds. Although banks can officially not buy shares of other banks, this restriction could be circumvented by founding fully-owned investment funds. Through this channel, banks hold up to 25 percent of the shares in each other (Mejstrik, 1994).

Poland

In Poland, banks are assigned a comparatively strong role in the execution of the Law on the Restructuring of Banks and Enterprises which has come into force in March 1993 (Pawlowicz, 1994a, 1994b, 1995). Besides providing the legal background for the recapitalization of the state-owned commercial banks, this law assigns a role to banks in leading and organizing debt restructuring cases. Loans which are being dealt with under the regulations of this law must be transferred to a special loan work-out unit within the bank. New lending to the affected firms must temporarily be suspended.

Under the new law, banks have in principle four options to deal with a loan that has turned out non-performing (Kawalec et al., 1994):

1. If the debt owed to the bank exceeds 10 percent of the total liabilities of the firm and 1 billion Zloty *or* if it exceeds 20 percent of the firm's debt, a bank-led conciliation process can be started. This method can also be applied by banks other than those benefiting from recapitalization between 1993 and 1996 in the cases of those firms which are at least 50 percent state-owned. The bank-led conciliation procedure is the main innovative part of the program. It strengthens the role of large creditors – which in most cases are the banks – because it allows decisions to be made by simple majority rule (Belka, 1994, p. 76). The Polish government as one major creditor in most firms announced that it would proportionally meet any debt reductions agreed upon by other creditors (van Wijnbergen, 1994, p. 10). Companies which apply for banks to initiate a bank-led conciliation procedure had to submit a financial and a restructuring plan by the end of March 1994; this deadline had been extended to September 1994 for the Savings and for the Agricultural Bank which were included in the program at a later stage.
2. A regular bankruptcy procedure can be started (court-led conciliation).
3. The firm can be liquidated.
4. The bank can sell the debt of the enterprise on the market. Generally, debt buy backs of enterprises are possible.

Generally, debt-to-equity swaps are one possible outcome of the bank-led conciliation procedures. Such swaps would incidentally increase the corporate governance role of banks in enterprises. Yet, Polish tax laws currently rather discourage debt-to-equity swaps. Prior to a debt conversion, provisions that had been made for the loans in question must be dissolved, and are subjected to regular taxation. Afterwards, new after-tax provisions must be made by the full amount of the equity stake. As a consequence, first results of the debt restructuring programs indicate that banks swapped debt into equity in less than one percent of the cases (Table 4). Reportedly, however, many more debt-to-equity swaps were originally envisaged, but they did not come into force because of the tax disincentives as well as of lengthy bargaining procedures with government agencies which have to approve the conversions. As a consequence, ownership of firms by investment funds or banks is thus far of marginal importance in the case of Poland (EBRD, 1995, p. 131).

The Polish Ministry of Finance collected data on the results of the restructuring program until April 1994. According to this source, conciliation procedures had been initiated by March 1994 in 25.5 percent of all cases, accounting for 53 percent of the credit volume (Table 4). Hence, conciliation procedures were

chosen for debtors of above-average size where banks could expect their efforts to pay off. Consequently, debt sales were chosen in 12.1 percent of the cases, accounting for only 1 percent of the loan volume.

Table 4 — Results of the Polish Program on the Restructuring of Banks and Enterprises, 1994.

| | March 1994 7 banks ^a | | 9 banks ^b | December 1994 Other Total | | Total |
|----------------------------------|------------------------------------|-----------------|-------------------------|-----------------------------------|------|-----------------|
| | (% of loans) | (% of cases) | | (% of loans) | | (% of cases) |
| Total conciliation procedures | 53.0 | 25.5 | 54.8 | 30.9 | 36.6 | 9.5 |
| Bank-led | ... | ... | 50.5 | 25.3 | 31.3 | ... |
| Court-led | ... | ... | 4.3 | 5.6 | 5.3 | ... |
| Bankruptcy or liquidation | 12.0 | 22.1 | 12.8 | 25.8 | 22.7 | 14.0 |
| Debt sale | 1.0 | 12.1 | 1.6 | 19.2 | 15.0 | 48.9 |
| Debt-to-equity swap | ... | ... | 2.0 | 0.5 | 0.9 | 0.8 |
| Repayment | 16.0 | 26.0 | 0.8 | 0.7 | 0.7 | ... |
| Other | 18.0 | 14.3 | 28.0 | 22.9 | 24.1 | 26.8 |

a) These data account for 82 percent of the loans submitted to the program by March 1994. — b) These banks account for 23.7 percent of all loans covered.

Sources: Kawalec at al. (1994); Wyczanski (1995); unpublished data of the National Bank of Poland and of the Polish Ministry of Finance.

While the data of the Ministry of Finance only covers seven banks, more recent data for all banks were collected by the National Bank of Poland. Out of the total loan volume involved, 23.7 percent had been submitted by the nine commercialized banks, the Agricultural Bank (BGZ) alone accounting for a further 50 percent. Altogether half of all irregular loans were included in the program. By December 1994, the most important restructuring method (31.3 percent) was the bank conciliation procedure. Banks made thus use of the strengthened position that was assigned to them. This trend has been more pronounced for the nine banks than for the rest of the banking system. Both, debt sales and liquidations – and thus relatively passive strategies – had become more important than at the early stage of the program. Unspecified items account for about one fourth of total loan volume. One explanation for this high share is that loans in this category were transferred to the state-owned Intervention Fund which engages in

centralized debt restructuring. With regard to the actual involvement of banks in the restructuring of firms, only anecdotal evidence is available. While banks have developed strategies for improving their own monitoring techniques, they seem to have been relatively inactive with regard to the real restructuring of firms. If anything, they tended to carry on with the plans which had already been developed by enterprise management. The main impact that banks exerted on firms was to deny access to new credit.

Also in Poland, banks may assume a corporate governance role through their management of investment funds (Bartkiewicz/Bledowski, 1995). In contrast to the Czech case, Polish investment funds did not arise spontaneously but were rather created by the government. 15 National Investment Funds were founded on the basis of the Mass Privatization Act of April 1993. These funds received 60 percent of the shares of companies to be privatized, the remaining shares being earmarked for the employees and for the state. The allocation of the shares of the 413 enterprises to the investment funds is done in separate selection rounds which ensures concentration of the shares in a „lead“ fund (EBRD, 1995, p. 137). Banks play a role in this process because they own shares in the management companies of the investment funds. Each Polish citizen has the option to purchase share certificates. These certificates, in turn, can be exchanged for shares in the investment funds. Yet, 15 percent of the investment fund shares will be retained for future remuneration of the management companies in form of a fee. Experience with the mass privatization program, which covers 7.8 percent of Polish enterprises in terms of sales, is not yet available. Only in December 1994 were the National Investment Funds incorporated, and the distribution of share certificates has been envisaged for autumn 1995.

As regards the differential performance of the Czech and the Polish investment funds, no evidence is available so far. It has been argued that the spontaneous evolution of investment funds as in the Czech Republic may be detrimental to the evolution of concentrated shareholdings of the funds (EBRD, 1995, pp. 137). In addition, due to the danger of conflicts of interest, Czech investment funds may be less willing to engage into active enterprise restructuring than the Polish funds. At the same time, the more centralized approach to the establishment of funds in Poland may allow more concentrated ownership structures to evolve. Yet, these concerns against the spontaneous evolution of investment funds appear to have little relevance. First of all, Czech investment funds did in fact try to compose concentrated portfolios of shares but their shareholdings are restricted by law. Second, conflicts of interest are also likely to arise in Polish in-

vestment funds because of the ownership links between the funds and commercial banks. At the same time, the involvement of the Polish government in setting up the investment funds has delayed the privatization process and is unlikely to have created a more efficient market structure.

Hungary

In Hungary, debt restructuring has been organized in a centralized way up to 1994 through the State Property Agency. Yet, a more decentralized approach has been adopted recently. In the context of the bank consolidation program of 1994, banks have signed conciliation agreements with the Ministry of Finance. These agreements require the participating banks to organize creditors' committees, including the government and other state organizations, by the end of March 1994. Because suppliers are not participating in these committees, the voting power of government representatives typically exceeds that of corporate creditors (Szanyi, 1995, p. 25). The committees have to submit restructuring proposals within 60 days. These proposals can foresee debt forgiveness, debt-to-equity swaps, or debt restructuring as means to deal with problem loans. The banks were given time until the end of 1994 to evaluate the proposals made through work-out units that had to be established. Generally, the conciliation agreements remain in force until the end of 1995. The program is supervised by the Ministry of Finance which also ensures its voting right in the banks through a "golden share".³⁷

Thus far, little information is available regarding the outcome of the Hungarian bank consolidation program. Altogether more than 2,000 restructuring proposals were submitted. Incidentally, banks invited more companies to participate in the program, albeit with limited success. Szanyi (1995) reports some preliminary results which indicate that banks adopt a rather passive behavior. Only one half of the firms submitted viable reorganization plans. This indicates that quite substantial efforts would be needed on part of the banks to restructure firms, but at the same time, banks lack the personnel to perform this task. It seems that in most cases banks react to their shortage of qualified personnel by trying to sell non-performing loans to the State Property Agency. Altogether roughly 20 percent of the stock of enterprise credit were covered by the debt consolidation pro-

³⁷ Even without this right, the influence of the government on the banking sector is still quite substantial since the recapitalization program has raised government ownership to more than 70 percent in five out of the participating 8 banks (Buch, 1996).

grams. Out of these 149 billion Forint, debt restructuring cases had been completed for 30 billion or 20 percent by autumn 1995 (EBRD, 1995).

2. Legal Regulations of Financial Markets

The access of enterprises to external financial sources is also affected by laws that regulate the access to the equity and to the bond market. These regulations, in turn, have an impact on the system of corporate governance that is evolving. The corporate law, stock market regulations, disclosure rules, or bankruptcy regulations must be addressed in this context.

Both, in the Czech Republic and in Hungary, the issuance of bonds requires prior approval of the Ministry of Finance. Similarly, restrictions pertain to the access to bond finance from abroad. In Hungary, only firms which have been in operation for at least one year and which meet certain minimum disclosure standards can issue bonds domestically. These regulations explain the comparatively moderate role that public bond offerings play for the financing of firms in Eastern Europe (Section IV.3.2.). Access to bank lending is in most cases cheaper and quicker than access to the bond market. Yet, one of the major obstacles to raising bank credit is the lack of reliable frameworks for the provision of collateral. Central registers for mortgages, clear seniority rules, and a reliable legal framework are often lacking in the economies under review (Bear/Gray, 1994, pp. 23). Only by the end of 1995, Poland plans to establish a central register for mortgages in order to prevent double-pledging from occurring (Standard and Poor's, 1995).

As regards access to the equity market, the rights and possibilities of outside shareholders to control management are decisive. Because the separation of ownership and control – and thus the corporate governance problem – is most pronounced in large joint stock companies, the following analysis will focus on these legal entities. All countries under review have adopted a general governance structure consisting of a board of directors which is in charge of the firm's daily operations and a supervisory board which ideally adopts a more long-term view of the firm. Czech corporate law, for example, distinguishes the executive board as being in charge of directing management from the supervisory board which oversees the firm's financial and legal affairs. Owners and thus also representatives of investment funds can in principle be represented in both bodies which

tends to increase their control over the firms in question (Brom/Orenstein, 1994, p. 910; Frensch, 1994, p. 51).

With respect to the protection of minority interests, Hungary explicitly allows for small shareholders which combined shares account for at least 10 percent of total share capital to call up a general shareholders' meeting. Here, shareholders which represent at least 50 percent of the capital must be present for a quorum of the shareholders meeting. In the Czech Republic, in contrast, only 30 percent suffice, and this rule can be changed by company statutes, giving more flexibility to potential agreements with investors (Gray, 1993). Provided that other preconditions are met, no quorum is required in Polish joint stock companies.

In the countries under review, stakeholders have quite different rights and incentives to force firms into bankruptcy or to threaten to do so in order to improve performance. First of all, Hungary has been the first country in the region to enforce a bankruptcy law, which included an automatic trigger clause, in 1991. Yet, because the automatic trigger led to large scale bankruptcy petitions with the Hungarian courts, it was eased later on. The Czech Republic and Poland, in contrast, have been much more hesitant with subjecting firms to an effective bankruptcy threat, thus eventually perpetuating the existence soft budget constraints. Although a bankruptcy law had been passed in the Czech Republic already in 1991, it did not come into force prior to April 1993. Similarly in Poland, the bankruptcy law of 1934 has not yet come to its full enforcement. Furthermore, the definition of a bankruptcy case remains vague. Second, the countries assign different seniority rights to creditors. Most importantly, Hungary and Poland require taxes and social security payments to be paid in advance of other creditors. If anything, this provision should provide disincentives to large creditors to initiate a bankruptcy proceeding as they can expect that their loan recovery rate will be small. Creditor passivity may thus be promoted. In Hungary, this creditor passivity seems to have characterized the behavior of banks at least until 1993. Between 1992 and 1993, banks filed petitions for bankruptcies of firms in a mere 1.5 percent of the cases (Gray/Schlorke/Szanyi, 1995, p. 30). The bulk of cases (67.5 percent) was initiated by other, non-bank creditors, followed by the cases initiated by the firm itself (18 percent), or by the government (13 percent).

All countries have established or re-opened, respectively, their stock markets during the reform process. In June 1990, the Budapest Stock Exchange was the first to open, followed by the Warsaw Stock Exchange in 1991, and the Pra-

gue stock market in 1993. Yet, weak information and regulatory structures are currently preventing the stock markets from playing a major role in these economies. Thus far, the operations of stock markets do offer little progress with respect to improving the flow of information on firms and of firm performance through take-over threats. This is evidenced by the Czech situation. Although two official markets for company shares, the Prague stock exchange and the computerized RM-system, exist, about 80 percent of total trading is made in private, over-the-counter markets (Matesova/Seda, 1994, p. 33). Hence, little to no information is available regarding the trading volume and the prices in this major segment of the capital market. Incidentally, access to the RM-system is more liberal since it only depends on the payment of a certain fee rather than on membership as in the stock exchange. Yet, investors have increasingly focused their activities on the official stock market, as far as recorded transactions are concerned. Whereas the RM-market accounted for 24.4 percent of the volume of all (recorded) trades in 1993, its share had gone down to a mere 2.6 percent in the first half of 1995 (CNB, 1995, p. 58). New stock market legislation that is currently pending aims at a greater protection of minority shareholders and at providing an improved legal background for company takeovers (Planecon, 1995).

3. Financial Market Structure

The previous discussion has shown that legal regulations as well as institutional bottlenecks which are inherent to financial markets may prevent firms' access to external financial sources. This section presents some empirical evidence as to the actual importance of different financial sources in the countries under review.

3.1. *The Financial Structure of Firms*

Different initial conditions, regulations of the financial system as well as the quality of information systems can be expected to have an impact on the financial structure of firms. Such information could be obtained for the Czech Republic and for Poland.³⁸ A first look at the financial structure of Czech firms re-

³⁸ External financing through interenterprise credit has furthermore caused particular concerns during the transformation process because it was feared that interenterprise debt would have negative feedback effects on the conduct of monetary policy and on the stability of the financial system. Yet, although the empirical evidence on the importance of interenterprise debt is somewhat scattered, most authors now seem to agree that the observed increase of interenterprise debt during the transi-

veals that their financing pattern is more similar to firms in developed countries than to those of the subsample of developing countries (Section III.4.). This difference between the sample of developing countries and the emerging market economies in terms of the importance of new equity finance is most likely to be explained with the presence of some basic financial market structure in the former group of countries. At the same time, stock markets and the needed institutional arrangements were completely lacking in Eastern Europe under the socialist system.

Table 5 — Sources of Financial Funds in the Czech Republic, 1989-1994.

| | 1989a | 1990 | 1991 | 1992 | 1993b | 1994b |
|----------------------------|-------|------|------|------|-------|-------|
| Total sources | 100 | 100 | 100 | 100 | 100 | 100 |
| Retained earnings | 77 | 23 | 27 | 56 | 73 | 65 |
| Depreciation | 26 | 34 | 36 | 131 | ... | ... |
| Bank borrowing | -3 | -7 | 16 | 3 | 17 | 25 |
| Borrowing from enterprises | ... | 50 | 21 | -90 | ... | ... |
| Foreign loans | ... | ... | ... | ... | 2 | 1 |
| Other sources | 0 | 0 | 0 | 0 | 8 | 9 |

a) CSFR. — b) January-June.

Sources: Frensch (1994, p. 49); OECD (1994a).

In 1994, retained earnings accounted for 65 percent of total financing in the Czech Republic (Table 5). Bank borrowing was also relatively important with 25 percent, reaching an even greater share than in 1993 (17 percent). This financing pattern, however, had changed significantly during the transformation period. While Czechoslovak enterprises in 1989 could finance 77 percent of their investment out of retained earnings, this share dropped to only 23 percent in 1990 as a response to the transformation-induced decline in enterprise profitability. Incidentally, this value roughly corresponds to the pre-reform level of the 1980s (Capek, 1994). Since 1991, retained earnings gradually became more important as a source of finance.

tion period was an adjustment to the pattern observed in developed market economies rather than the indicator of a deep systematic crisis (Belka/Krajewski, 1994, p. 14; Bonin/Schaffer, 1994, pp. 13; Brom/Orenstein, 1994, p. 902; Dittus, 1994, p. 348).

In Poland, the importance of bank credit as a source of finance for investment projects declined from 20.4 to 17 percent between 1990 and 1993 (Vinton, 1995). Private sector firms, in contrast, financed only 12.3 percent of investment from bank loans. Additional evidence on the financial structure of Polish firms can be gained from the results of a survey of 200 enterprises which reflects the situation at the end of 1993 (Belka et al., 1994, pp. 29). The survey shows that 18 percent of state-owned firms had negative equity. Leverage was lowest in private and corporatized firms where equity was twice as high as total debt in 38 and 46 percent of all firms, respectively. This finding is also confirmed by Groszek (1995, p. 22) who reports that small and mid-sized Polish enterprises finance 77.4 percent of their investment from their own savings.

Yet, the low leverage ratios of private firms should not a priori be taken as a signal that these firms are excluded from the credit market. Rather, private firms in Poland find it comparatively easy to obtain banks loans. Belka et al. (1994) find that only 10-15 percent of private firms but 35-40 percent of state-owned firms were refused bank credits. For private firms, the main reason for a refusal of a loan was the lack of collateral, for state-owned firms their poor financial situation. Bear and Gray (1994, p. 38) show furthermore that Polish banks prefer to lend to new firms and to firms with a high share of fixed assets. This implies that Polish banks try to overcome informational asymmetries with respect to the private sector by relying on self-selection mechanisms.

As regards the role of banks in the financing of new private manufacturing firms in the initial reform period, the surveys of Webster (1992a, 1992b) and Swanson/Webster (1992) give additional insights.³⁹ In Poland, more than two-thirds of private firms had obtained bank credit until early 1991 while the remaining firms had not applied for a loan because of high interest rates. According to the survey, firms that were willing to pay the current interest rate received bank finance, and banks had been rather flexible in defining assets acceptable as collateral. Similarly, in former Czechoslovakia, private firms had fairly little problems in obtaining bank finance. About two thirds of all firms included in the sample had received bank credit during the first six months of their operations. Yet, this extension of credit to the private sector may have been overly expansive. Banks thus started to raise interest rates and to increasingly demand the provision of collateral towards the end of the survey period. In Hungary, in contrast, banks

³⁹ The surveys were conducted in May 1991 (Poland), September 1991 (Hungary), and January 1992 (former Czechoslovakia) in about 100 domestically-owned, private firms in each country.

had already been relatively conservative in financing start-ups early on. Hence, only 11 percent of the enterprises surveyed had received a bank loan after 6 months of operations. Generally, bank lending to new firms in Hungary tended to come at a later stage and with a shorter maturity than in former Czechoslovakia and in Poland.

According to aggregated data on the lending portfolios of commercial banks, the share of the private sector in total domestic credit has increased substantially in the Czech Republic and in Poland since the onset of reforms. Comparable data for Hungary have not been available. In the Czech Republic, the private sector increased its share in lending to enterprises from a mere 0.1 percent in 1989 to 69.9 percent at the end of 1994. In Poland, this increase was somewhat less drastic with a share of 10.1 percent in 1990 as compared to 55.7 percent in 1994. Yet, in particular in the Czech case, these numbers are misleading because many enterprises were merely reclassified during voucher privatization while no real changes may have taken place in the lending behavior of banks. Furthermore, since 1992, cooperatives are not treated separately from the private sector, thus additionally overstating the private's sector credit share. All countries under review have established subsidized lending facilities and credit guarantee schemes for small private enterprises. In Poland, a new local network of credit guarantee funds is currently being organized (EBRD, 1995). Yet, the capitalization of the fund with 25 million Zloty or less than 1 percent of total enterprise credit is rather modest.

3.2. Importance of Non-Bank Financial Intermediation

Information about the financial structure of firms can also be obtained from data about the importance of non-bank financial intermediaries (Table 6). Thus far, venture capital could make only a very limited contribution to the financing of firms. This item has been most important in Hungary and Poland, reaching roughly 3.7 percent of the value of the outstanding loans to enterprises in 1994. In the Czech Republic, however, venture capital finance was less than one percent of the stock of bank credit. Although in the Czech Republic the value of enterprise shares is about 18 percent of the value of bank loans, the figure says little about the amount of *new* equity which could be raised through the stock market. Rather, the high degree of stock market capitalization is the reflection of the voucher privatization program under which large amounts of equity were converted into publicly traded shares. In Hungary, the face value of total shares

(including those of financial firms) amounted to only 5 percent of the stock of enterprise debt in early 1994. For Poland, again, only data about the total capitalization of the stock market are available. Taking into account that shares issued by banks account for about 30 percent of this number (Planecon, 1995b), stock market capitalization is only 12 percent of total bank lending to enterprises. Even though in the Czech Republic 19 bond issues were made between 1990 and 1993 (Matesova/Seda, 1994), industry bonds have a value of only 2.9 percent of the stock of enterprise credit. Overall, enterprise bonds account for 5.4 percent of all bonds outstanding (CSU, 1994).

Table 6 — *Indicators of Non-Bank Financial Intermediation, 1993-1994.*

| | Czech Republic | Hungary | Poland |
|--|----------------|---------|--------|
| <i>(in percent of stock of enterprise credit)</i> | | | |
| Size of venture capital funds | 0.8 | 3.7 | 3.6 |
| Stock market capitalization (enterprises) | 18.1 | ... | 12.9a |
| Face value of securities (enterprises) | 2.9 | ... | ... |
| <i>(in percent of stock of domestic credit)</i> | | | |
| Size of venture capital funds | 0.7 | 1.2 | 1.7 |
| Stock market capitalization (total) | 47.1 | 5.2 | 8.7 |
| Face value of securities (total) | 5.4 | 18.9 | ... |
| Data as of December 1993 (Czech Republic, stock markets), February 1994 (Hungary), mid-1994 (Czech Republic, security markets), and November 1994 (Poland). — a) Total market capitalization minus 30 percent in shares of commercial banks. | | | |

Sources: Banks and Exchanges (1994); Business Central Europe (1995); CSU (1994, p. 131); Frensch (1994, p. 34).

Table 7 provides some more evidence with respect to the structure of the stock markets in the countries under review and compares these indicators with those of three West European economies. As could already be seen from Table 6, stock market capitalization relative to GDP is by far the largest in the Czech Republic – even exceeding that of the Western economies – while Hungary and Po-

land lag substantially behind. At the same time, however, the Czech stock market is relatively illiquid as compared to the volume of shares traded. Market turnover relative to market capitalization is only 11.0 percent as compared to values well above 100 percent in the cases of Poland, Greece, or Portugal. Mainly, this reflects the fact that technical facilities and information systems in the Czech Republic are incapable of dealing with the number of publicly traded shares that have been issued during voucher privatization. Comparing market turnover to GDP, it turns out that stock markets are of much smaller importance in the Czech Republic and in Poland than in Germany while reaching a similar order of magnitude as in Portugal (about 30 percent). Interestingly, Hungary lags far behind with respect to this measure since market turnover only reaches a volume of 12.2 percent of GDP.

Table 7 — *Stock Market Indicators, 1994.*

| | Czech Republic | Hungary | Poland | Germany | Greece | Portugal |
|---|---------------------|---------|--------|---------|--------|----------|
| | <i>(in percent)</i> | | | | | |
| Market capitalization / GDP | 44.7 | 4.9 | 3.3 | 24.5 | 20.1 | 20.3 |
| Market turnover / market capitalization | 11.0 | 16.4 | 179.5 | 90.0 | 365.0 | 148.4 |
| Market turnover / GDP | 29.7 | 12.2 | 29.9 | 54.6 | 81.5 | 29.9 |

Source: EBRD (1995, p. 168).

V. SUMMARY AND CONCLUSIONS

This paper has tried to achieve two goals. First, it addressed the question which type of financial system would benefit the transition economies. Second, the paper presented some empirical evidence regarding the actual structures of the financial systems that are emerging.

Generally, it was found that efficient banks can contribute to a better access of new private firms to the credit market as well as to an enhanced corporate governance of state-owned firms during the privatization process. Considering the urgently needed improvements in the corporate control of large enterprises, the transition economies can in particular benefit from the adoption of a universal banking system. Universal banks as being debt and equity holders of firm at the same time can potentially impose an optimal control structure on the firms, they can be sources of long-term finance, and they can contribute to real sector restructuring.

Yet, it was also pointed out that the adoption of a universal banking system entails substantial risks for the nascent market economies. Holding debt and equity of a firm raises a bank's exposure to firm-specific risks and may lead to conflicts of interest within the bank, thus lowering bank efficiency. These risks are particularly pronounced in the Eastern European setting because of the inexperience of bank managers, because of weak incentive systems within banks, and because of interlocking ownership between banks and enterprises. The only way to reduce most of the resulting risks, however, would not only be the prohibition of universal banking but also of other commercial banking activities. Yet, under such a narrow banking system, important efficiency gains would be sacrificed.

In view of the risks of universal banking, general policy guidelines are difficult to prescribe. Rather, country-specific factors such as, most importantly, the degree to which the government has refrained from interfering with the decision making processes within the banks must be considered when deciding to which degree universal banking should be permitted. Also, the determination of the government to push forward policies towards hardening the budget constraints of banks and enterprises is a lackmus-test for the adaptation of market principle in banking. In most banks in the countries under review, governments are no more *directly* being involved in the lending decisions. Yet, their remaining ownership stakes potentially give them great leverage over management decisions. Hence,

quickly privatizing the remaining stakes would make the banking systems less inclined to take on politically-motivated risks and would make them more stable.

Generally, it was proposed that commercial banks should be allowed to perform investment banking activities and to hold limited amounts of equity in enterprises. Banks should be required to fully provision against these equityholdings, and state-owned banks which are merely executing orders of governments or of central banks should be substantially restricted in their exposure to enterprise shares. Adopting a subsidiary-type universal banking structure may reduce the potential for conflicts of interest and may furthermore ease the supervision of the banks.

At the same time, the governments need to create legal and regulatory frameworks that allow banks and other financial intermediaries to perform their functions in an economy. Essential elements of such a reform strategy are the strengthening of banking supervision, deposit insurance reform, improvements in the corporate control of (state-owned) banks, the enforcement of a bankruptcy threat for banks, and improvements in the information systems, notably the adaptation of disclosure requirements. Setting a clear time-table for the privatization of banks and enterprises is furthermore essential for improving incentive mechanisms. In addition, the legal framework for the collateralization of bank lending must be determined. Incidentally, this is one measure which can help to improve access of new private firms to the credit market. While all countries under review have made substantial improvements in these areas, reforms to date have been rather gradual and are still being incomplete.

Even if the above reform steps have been successfully implemented, banking in the transition economies will remain inherently risky for a considerable amount of time. Financial contracts which are conditioned upon uncertain future cash flows are concluded in a rapidly changing institutional environment. Hence, even if the needed structural reforms have been implemented, positive net present value firms may still be confined to self-finance simply because outsiders cannot evaluate projects or because they deem the risk that they observe as being too high. A similar conclusion applies to the ability of the stock market to provide effective corporate governance. Currently, these markets are rather shallow and illiquid, thus not providing investors with the institutional preconditions needed for effective outsider control. All countries have enacted disclosure requirements for publicly traded firms, and have – with the exception of Poland – explicitly

prohibited insider trading. These regulations, however, need time until they are effectively and fully being implemented.

Turning to the empirical analysis that this paper was able to provide, it is immediately clear that solid evidence on the functioning of financial markets and of corporate governance systems in Eastern Europe is still lacking. This lack of information is not unique to these countries. Even the functioning of corporate governance systems in developed market economies is not very well understood due to a lack of microeconomic data on the issue. Despite this obvious shortcoming, the paper could find some common patterns in the countries under review which allow some tentative conclusions to be drawn. First of all, all countries have opted for some kind of universal banking system with restrictions on investment banking activities being strictest in the case of Hungary. In all countries, banks can hold equity in firms. Direct involvement of banks in the restructuring of firms has actively been sought by the Polish, more recently also by the Hungarian authorities. In the Czech Republic, such a role has evolved more spontaneously through the banks' involvement in the investment fund structure.

Generally, however, banks seem to be relatively cautious regarding their actual involvement in enterprise restructuring, in particular to the extent that it would require the acquisition of equity stakes in firms. Partly, this observed reluctance is the result of regulatory hurdles, to a major extent, however, it also reflects the banks' presumption that the risks from such engagements would outweigh the informational advantages that the banks may have. Seen from this angle, there is thus little evidence for the hypothesis that banks do not consider the risks of their activities. The risks which are in fact evident in the Eastern European banking systems primarily stem from traditional commercial banking activities. A lack of loan assessment skills, the maintenance of at least a partial automatic deposit insurance system as well as substantial amounts of non-performing loans on the balance sheets of banks remain a threat to a lasting stability in the banking sectors.

In order to solve these problems, recapitalizations of banks should not be considered. Instead, banks should be given more leeway to provision against their non-performing loans. By clarifying seniority issues, banks can furthermore be provided with greater incentives to engage in the restructuring of firms and possibly to recover some of their bad loans. The results of the Polish restructuring law show that banks made use of the role that was assigned to them through the bank conciliation method. Such decentralized debt restructuring utilizes the

learning potential of banks and may lay the basis for a more solid loan assessment in the future.

Information about the access of private firms to the loan market was particularly difficult to obtain. If anything, private enterprises have to rely on retained earnings as a source of finance to a greater extent than firms on average. This can be attributed to two factors. First, private enterprises tend to be more efficient than state-owned enterprises, thus allowing them to finance expansion through internally generated sources. Second, private firms may have been credit rationed to some extent. Hence, only those firms would actually remain in the market that could earn sufficiently large short-term cash flows. Evidence on the behavior of banks indeed indicates that asymmetries in information prevail. Banks often postpone the provision of new loans until firms have a sufficiently long track record, and they typically require collateral to be pledged.

As regards the remaining obstacles to efficient financial systems, the countries would benefit from more closely involving foreign institutions into the process. While technical assistance has actively been sought and used already, the market access of foreign banks has not always been treated that favorably. Yet, considering the capital that is needed in order to privatize the state-owned banks and the competitive pressure that some of the very dominant successor banks need to be exposed to, it is hardly conceivable how improvements could be made without tapping foreign sources. Competitive pressure exerted through foreign banks can impose substantial adjustment pressure on the large state-owned banks and force them to improve their operational efficiency.⁴⁰ At the same time, fears that foreign banks would put the overall viability of domestic banks at risk appear misplaced. The evidence so far implies that new foreign market entrants tend to occupy certain market niches rather than entering the traditional banking business on a large scale. More specifically, remaining obstacles to the market entry of foreign banks should be removed even before the final deadline specified in the Europe Agreements of 1991 and to seek close cooperations with foreign banking supervisors. These agreements in principle allow differential treatment of domestic and foreign banks to be maintained until the year 2001.

⁴⁰ Note that this argument applies only to those foreign banks that have their origins in developed Western market economies with strict banking supervisory systems. As regards foreign banks originating from other formerly socialist countries, notably some successor states of the Soviet Union, the reform states under review may want to be more selective when granting new licenses.

APPENDIX

Table 8 — *Indicators of Corporate Governance Structures in the Czech Republic, Hungary, and Poland.*

| | Czech Republic | Hungary | Poland |
|-----------------------------------|---|--|--|
| (1) Corporate law | <i>Commercial Code (January 1992), Act No. 104/1990 "On Joint Stock Companies"</i> . | <i>Law No. VII/1988 "Company Law"</i> . | <i>Law on Economic Activity, Polish Commercial Code (1934, with later amendments).</i> |
| Joint stock companies | Companies with limited liability which shares may be freely traded. Minimum capital: 1 mil. Czech Crowns. Securities law is pending which would require notification of shareholdings exceeding certain thresholds. | Minimum share capital is set at 10 mil. Forint. Foreigners can only buy registered shares. Shares resulting from management and employee buy-outs cannot freely be traded. Shareholders with more than 10 % of votes must notify Securities Commission and GSM before acquiring an additional 2 %. | Minimum capital is 1 bil. Zloty with each share being worth at least 500,000 Zloty. Shareholdings exceeding certain thresholds must be notified. Public offer is required for shares exceeding 33 %. |
| General shareholder meeting (GSM) | 30 percent quorum of nominal capital is needed. Quorum and voting rules can be changed by company statutes. | GSM has a quorum if more than half of the shares with voting rights are present. Statutes may require higher quorum. Minority shareholders which hold at least 10 % of the shares can call a GSM and request management activities to be reviewed by the SB. | Generally, the GSM is valid regardless of the number of shares represented (commercial code specifies exceptions). Shareholder(s) accounting for at least 10 % of shares can call GSM. Proxy-voting is possible. |
| Board of directors (BoD) | Must have a minimum of 3 members, elected by GSM. Manages company. Same person <i>cannot</i> be on BoD and on SB. Owners <i>can</i> be present on both boards. | Elected by GSM. Members of BoD cannot run business under their own name which is similar to that of the company that they manage. | Has one or more members. Shareholders can be members of BoD. Elected by GSM for a maximum of 3 years. |
| Supervisory board (SB) | Minimum of 3 members, elected by GSM. In enterprises with more than 50 employees, 1/3-1/2 of members must be elected by employees. Has authority to dismiss some members of BoD. | If employment exceeds 200, at least one third of the SB must be elected by the employees. | Mandatory for any firm with capital in excess of 5 mil. Zloty. Must have a minimum of 5 members. Has authority to dismiss all members of BoD. |

Table 8 continued

| | Czech Republic | Hungary | Poland |
|-------------------------------|--|--|---|
| (2) External financing | <i>Bond Act (1992/1995).</i> | <i>Act on Securities and the Stock Exchange (1990).</i> | |
| Law of pledge | System of collateral is underdeveloped and no central register of mortgages exists. | Although mortgages have been possible for a long time under Hungarian law, poor collection methods and disincentives of creditors due to seniority regulations disfavour use of collateral. | Secured creditors do not have priority claims. Not the first but rather the last lien has priority. Legislation pending which seeks to establish central register for collateral. |
| Bond finance | Nominal face value of bonds must be a minimum of 1.000 Czech Crowns. A licence of the MoF is needed for the issuance of bonds. | Companies can to a certain extent issue interest-bearing shares and other debt instruments. Pre-conditions for a bond issue are that (i) company has been in operation for more than 1 year, (ii) has published prospectus, (iii) entrusts issuance to public trader. A licence is needed for the issuance of securities abroad. | Market for enterprise bonds is rather underdeveloped, the majority of bonds in circulation has been issued by the government or by the National Bank. Companies cannot issue interest-bearing shares. |

Table 8 continued

| | Czech Republic | Hungary | Poland |
|---|--|--|--|
| (3) Universal banking | <i>Act on Banks (1992, amended 1994).</i> | <i>Act on Financial Institutions (amended 1991:12).</i> | <i>Banking Act (1989, amended 1992). Law on the Restructuring of Banks and Enterprises (1993).</i> |
| Activities of banks | Commercial and investment banking activities can be performed in one bank. | Commercial banks can perform investment banking activities through fully-owned affiliates. | Commercial and investment banking activities can be performed in one bank. |
| Equity holdings | Need to be notified and approved if they exceed 10 % of the <i>firm's</i> capital or if the sum of all equity holdings exceeds 25 % of the <i>bank's</i> capital. Limits do not apply for debt-to-equity swaps for 2 years (deadline can be extended by the Czech National Bank) or for shares acquired for third parties. | Commercial (investment) banks cannot hold more than 15 % (40 %) of their capital in stakes in one enterprise. Equity holdings cannot exceed 60 % of the bank's capital. They are unrestricted for 6 months if acquired through debt-equity swaps (3 years following Consolidation Agreements). | Banks cannot hold more than 25 % of their capital in enterprise shares (up to 50 % upon permission of National Bank of Poland). Debt-to-equity swaps are possible. |
| Role of banks in enterprise restructuring | Through involvement in Investment Fund structure (see 5). | Recently, through Consolidation Agreements as part of the recapitalization program. | Banks have de facto lead role in debt restructuring under debt conciliation procedures. |
| Corporate governance of banks | Banking supervision is task of the central bank. Although banks have been privatized in voucher scheme, government retains majority stakes in the largest banks. Large banks have SB with 12 members, elected for 4-year term. BoD consists of 7 members. SB may appoint 2 members of BoD. | Banking supervision is the task of the State Banking Supervision. By autumn 1995, only one large Hungarian bank has been privatized. BoD has 6-8 members. Since 1994 (November), CEO of a state-owned bank cannot be chairman of BoD. CEO chairs executive board (three-tier structure). | Banking supervision is the task of the central bank. Government retains ownership of 6 out of nine commercialized banks as well as of specialized banks. SB (Bank Council) has 5-10 members, elected for 3-year terms. Dismisses and appoints President of BoD (3-8 members, 3-year term). |

Table 8 continued

| | Czech Republic | Hungary | Poland |
|-----------------------------------|--|---|--|
| (4) Stock markets | <i>Law on the Stock Exchange and Securities (1992). Czech National Council Securities Act (1992)</i> | <i>Act on securities and the Stock Exchange (1990).</i> | <i>Act on Public Trading and Trust Funds (1991).</i> |
| Organization | Prague Stock Exchange and over-the-counter market (RM) have been in operation since 1993. Securities can be traded off the exchange if stock market regulation allows for this option. Security dealers need licence of the MoF which is also in charge of supervising exchanges (through commissioner of stock exchanges). Centre for securities organized by the MoF records book-entries of securities. Members of stock exchange have established guarantee fund. Foreigners can buy and sell shares. Pending legislation intends to make take-overs more difficult and to protect minority shareholdings. | Budapest Stock Exchange opened in 1990. Operates as a self-governing, self-regulatory institution under the State Securities Surveillance of the Ministry of Finance. Licences of the MoF are needed for security dealers. Limits on the cross-holdings of shares among security dealers apply. Listed securities cannot be traded off the official exchange. | Warsaw Stock Exchange opened in 1991. It is owned by 26 shareholders, one of them being the Treasury. Trading takes place on 4 sessions per week. Stock market legislation is intended to conform with EU-standards and follows the French model. Supervision is performed through the Stock Exchange Supervision Board. |
| Requirements for public offerings | Prospectus must contain data on issue, financial status, issuer's business and the characteristics of the security. It must be verified by a bank. Disclosure requirements were only weakly enforced until late 1993 for public joint-stock companies. | Stricter requirements apply to listed than to unlisted securities. Prospectus must be approved by the Securities Surveillance and by the National Bank. Public offering must be made through licensed underwriter. | Submission of share prospectus with information on economic activities, financial data etc. is required. Prospectus must be published in two national newspapers. Publicly traded securities must have a share value of at least 1 mil. ECU, and at least 20 % must be publicly offered. |

Table 8 continued

| | Czech Republic | Hungary | Poland |
|---|--|--|--|
| Insider trading rules | Honesty regulations as well as prohibition to use confidential information have been enacted. Stock exchange maintains a list of information insiders. | Insider trading, trading in own securities, and trading in securities in which trader has significant influence is prohibited. Trader must prove that he has not used insider information. | Investor protection is not explicitly regulated. Interests are intended to be protected through the government and the chairman of Securities Commission |
| Disclosure requirements | Minimal disclosure requirements apply according to the Stock Exchange Act but stricter requirements can be imposed through stock market regulations. Information must be disclosed annually, quarterly as well as upon relevant changes in the business conditions. | Public issuance of shares requires disclosure of relevant business information. Annual and quarterly reporting as well as reports on changes in relevant business characteristics is mandatory. Special disclosure requirements apply to investment fund securities. | Joint stock companies must publish annual tax return and annual report. No standard format for financial statements applies. Publicly traded firms must provide investors with access to full information on assets, financial standing, profits and losses, and (voting) rights. |
| (5) Other financial market institutions | <p><i>Investment Companies (IC) and Investment Privatization Funds (IPF) Act (1992).</i></p> <p>IPFs are prevented from investing more than 10 % of their assets in one firm. Holdings of one IPF or of a group of IPFs cannot exceed 20 % of a company's shares. This limit is intended to protect minority shareholders. ICs can create open- or closed-end mutual funds. ICs and IPFs are subject to state supervision. IPFs have largely been converted into unit trusts in order to prevent managers from take-overs.</p> | <p><i>Law on Investment Funds (1991).</i></p> <p>Capital of investment funds was 20 mil. US-Dollar in late 1994. Since 1993, non-state pensions funds are allowed.</p> | <p><i>Mass Privatization Act (April 1993).</i></p> <p>Investment Funds received 60 % of shares of firms to be privatized. Population buys share certificates which can be exchanged for shares in the Funds. 15 % of Investment Fund shares are retained for remuneration of its managers. In May 1995, 3 new open-end investment funds were licenced.</p> |

Table 8 continued

| | Czech Republic | Hungary | Poland |
|--|---|---|--|
| (6) Bankruptcy regulations | <i>Act No. 328/1991 "On Bankruptcy and Settlement" (effective April 1993).</i> | <i>Law 11/1991 "Bankruptcy Law" (effective 1.1.1992).</i> | <i>Bankruptcy Act of 1934, Insolvency Act of February 1990.</i> |
| Definition of bankruptcy | Enterprise has several creditors and has not been able to service debt 'over a long period of time'. | Company has not serviced debt for 90 days | Failure to meet debt payment obligations. Generally not applied to SOEs. |
| Declaration of bankruptcy | No automatic trigger. Petition may be brought in by debtor, creditor, or liquidator. Creditors must assert claims within 30 days. | Automatic trigger was abandoned in late 1993. Personal accountability of managers. | Petition through creditor or debtor possible. Personal accountability of managers. |
| Seniority of claims | (1) expenditures of trustee, (2) secured creditors, (3) workers, (4) taxes, fees, social insurance fees, (5) other. | (1) costs of liquidation incl. wages, mortgage claims, employee benefits, taxes, (2) secured and unsecured creditors, penalties for tax arrears, (3) other. | (1) court costs, (2) bankruptcy costs, (3) tax arrears (of past 2 years), (4) social insurance fund (of past year), (5) medical or funeral expenses, (6) normal creditors, (7) interest payments, (8) other. |
| Protection period / off-court agreements | Settlement procedures are possible during which debtor remains in control of assets and can postpone interest payments. Maximum protection period lasts 90 days. Instead of reorganization, a pro rata reduction of outstanding claims is possible. | Compromise agreement (out-of-court agreement) which does not require creditor unanimity. Protection period similar to Chapter 11-regulations. Nonjudicial workout procedure has been adopted. Agreements bind only the negotiating parties (government agreed to go along on a pro rata basis). | Liquidations as one form of transforming SOEs require only consulting role of workers' council. Mutual agreements, according to law of 1934, can only be initiated through debtor. Bank conciliation agreements assign banks a lead role in debt restructuring cases provided that banks receive approval of 50 % of outstanding debt. |

Table 8 continued

| | Czech Republic | Hungary | Poland |
|-----------------------------------|--|---|--|
| (7) Role of the government | Government retains ultimate control in state-owned enterprises (SOEs) while managerial decisions are largely autonomous. 'Basic' SOEs are governed by a Supervisory Council, 'public interest' SOEs directly by a state institution. | <i>Law on Enterprise Councils (Law No. 33/1984)</i> distinguishes two main types of SOEs. In utilities and in strategic firms, direct state control is maintained, in other SOEs, workers' councils are de jure important while de facto management retains most control. Government can retain a golden share under which 33.3 % of shares ensure 51 % of the voting rights. | <i>Laws on State Enterprises and on Self-Management (1981)</i> still apply to a number of SOEs. In public utilities, state organs have substantial control over management, in normal SOEs, workers' council have great impact on decisions. |

BoD = Board of Directors, GSM = General Shareholder Meeting, IC = Investment Company, IPF = Investment Privatization Fund, MoF = Ministry of Finance, SB = Supervisory Board.

Sources: Bartkiewicz/Bledowski (1995), Bear/Gray (1994), Bonin (1995), Brom/Orenstein (1994), EBRD (1994, 1995), Earle/Frydman/Rapaczynski et al. (1993), Gray (1993), Matesova/Seda (1994), Ministry of Finance (Hungary) (1991, 1992), Planecon (1995a), SBS (1994), Polish Development Bank (1994), Polish Society of Economic, Legal, and Court Translators (1995), Standard and Poor's (1995), Trade Links (1995a, 1995b), Wall Street Journal (8/9.12.1995), Wolff/Thompson/Nelson (1992).

LIST OF REFERENCES

- ABEL, Istvan, and Istvan P. SKEKELY (1995), Retail Banking in Central and Eastern Europe, Paper presented at the Task Force Meeting of the Institute for EastWest Study "State Withdrawal from the Banking Sector", December 4-5, 1995, London.
- BANKS AND EXCHANGES, Financial and Business Weekly, Budapest, 22.4.1994, p. 17.
- BARTKIEWICZ, Jarek, and Krzysztof BLEDOWSKI (1995), Poland's National Investment Funds, Pioneer Economic Research, Report No. 6, March, Warsaw.
- BEAR, Herbert L., and Cheryl W. GRAY (1994), Debt as a Control Device in Transitional Economies: The Experiences of Hungary and Poland, Paper presented at a joint conference of the World Bank and the Central European University Privatization Project on "Corporate Governance in Central Europe and Russia", 15-16 December 1994, Washington D.C.
- BELKA, Marek (1994), Financial Restructuring of Banks and Enterprises in Poland, *Most-Most*, Vol. 4, No. 3, 71-84.
- , Saul ESTRIN, Mark E. SCHAFFER, and I. J. SINGH (1994), Enterprise Adjustment in Poland: Evidence from a Survey of 200 Private, Privatized, and State-Owned Firms, Centre for Economic Performance (CEPR), Working Paper, No. 658, London.
- BELKA, Marek, and Stefan KRAJEWSKI (1994), Hardening the Budget Constraints for the Polish Manufacturing Enterprises (1991-1993) – A Wish or Reality?, Paper presented at the conference on "Experience of Economic Transformation in Central Europe – Lessons for the Future", April 14-16, 1994, Polish Economic Society, Warsaw.
- BERGER, Allen N., and Gregory F. UDELL (1995a), Relationship Lending and Lines of Credit in Small Firm Finance, New York University Salomon Center, Working Paper Series, No. S-95-5, New York.
- , — (1995b), Universal Banking and the Future of Small Business Lending, New York University Salomon Center, Working Paper Series, No. S-95-10, New York.
- BÉRGER, Allen N., Diana HANCOCK, and David B. HUMPHREY (1993), Bank efficiency derived from the profit function, *Journal of Banking and Finance*, Vol. 2/3, No. 17, 317-347.
- BERGER, Allen N., William C. HUNTER, and Stephen G. TIMME (1993), The efficiency of financial institutions: A review and preview of research past, present, and future, *Journal of Banking and Finance*, Vol. 2/3, No. 17, 221-249.
- BESTER, Helmut (1985), Screening vs. Rationing in Credit Markets with Imperfect Information, *American Economic Review*, Vol. 75, No. 4, 850-855.
- BONIN, John (1995), Banking in the Transition: Privatizing Banks in Hungary, Poland, and Czech Republic, Paper presented at the Task Force Meeting of the Institute for EastWest Study "State Withdrawal from the Banking Sector", December 4-5, 1995, London.
- , and Mark SCHAFFER (1994), Banks, Firms, Bad Debts, and Bankruptcy in Hungary: 1991-94, Paper presented at a joint conference of the World Bank and the Central European University Privatization Project on "Corporate Governance in Central Europe and Russia", 15-16 December 1994, Washington D.C.
- BÖS, Dieter, and Wolfgang PETERS (1989), A principal-agent approach on manager effort and control in privatized and public firms, Rheinische Friedrich-Wilhelms-Universität, Sonderforschungsbereich 303, Projektbereich A, Discussion Paper, No. 252, Bonn.

- BROM, Karla, and Mitchel ORENSTEIN (1994), *The Privatised Sector in the Czech Republic: Government and Bank Control in a Transitional Economy*, *Europe-Asia Studies*, Vol. 46, No. 6, 893-928.
- BUCH, Claudia M. (1994), *Dealing with Bad Debt – Lessons from Eastern Europe*, Kiel Institute of World Economics, Working Paper, No. 642, Kiel.
- (1995), *Monetary Policy and the Transformation of the Banking System in Eastern Europe*, Kiel Institute of World Economics, Working Paper, No. 676, Kiel.
- (1996), *Creating Efficient Banking Systems – Theory and Evidence from Eastern Europe*, Kiel Institute of World Economics, forthcoming.
- , Norbert FUNKE, Ralph HEINRICH, and Martin RAISER (1994), *Overcoming Obstacles to Successful Transformation in Eastern Europe*, Kiel Institute of World Economics, Kiel Studies, No. 261, Tübingen.
- BUSINESS CENTRAL EUROPE, February 1995, London, 7-10.
- CALOMIRIS, Charles W., and R. Glenn HUBBARD (1990), *Firm Heterogeneity, Internal Finance, and 'Credit Rationing'*, *The Economic Journal*, Vol. 100, No. 399, 90-104.
- CANALS, Jordi (1995), *Universal banks versus specialized banks: advantages and disadvantages*, mimeo.
- CAPEK, Ales (1994), *The Bad Debts Problem in the Czech Economy*, *Most-Most*, Vol. 4, No. 3, 59-70.
- CHEN, Yehning, J. F. WESTON, and Edward I. ALTMAN (1994), *Financial Distress and Restructuring Models*, New York University Salomon Center, Working Paper Series, No. S-94-34, New York.
- CHO, Yoon-Je (1986), *Inefficiencies from Financial Intermediation in the Absence of Well-Functioning Equity Markets*, *Journal of Money, Credit and Banking*, Vol. 18, No. 2, 191-199.
- CLARK, Jeffrey A. (1988), *Economies of Scale and Scope at Depository Financial Institutions: A Review of the Literature*, Federal Reserve Bank of Kansas City, *Economic Review*, Vol. 73, No. 8, 16-33.
- COFFEE, John C. (1994), *Investment Privatization Funds: The Czech Experience*, Paper presented at a joint conference of the World Bank and the Central European University Privatization Project on "Corporate Governance in Central Europe and Russia", 15-16 December 1994, Washington D.C.
- CORBETT, Jenny, and Collin P. MAYER (1991), *Financial Reform in Eastern Europe: Progress with the Wrong Model*, Centre for Economic Policy Research (CEPR), Discussion Paper, No. 603, London.
- CZECH NATIONAL BANK (CNB) (1995), *Report on the Monetary Development in the Czech Republic for the First Half 1995*, Prague.
- (CNB), *Vybrané Ukazatele Menoveho Vývoje České Republiky (Selected Indicators of Monetary Development in the Czech Republic)*, various issues, Prague.
- CZECH STATISTICAL OFFICE (CSU) (1994), *Statistical Yearbook of the Czech Republic*, Prague.
- DEWATRIPONT, Mathias, and Jean TIROLE, (1993), *Efficient governance structure: implications for banking regulation*, in: MAYER, Colin, and Xavier VIVES (eds.), *Capital markets and financial intermediation*, Cambridge, 12-34.
- , — (1994), *The Prudential Regulation of Banks*, Cambridge.

- DIAMOND, Douglas W. (1984), *Financial Intermediation and Delegated Monitoring*, Review of Economic Studies, Vol. 51, July, 393-414.
- DITTUS, Peter (1994), *Bank Reform and Behavior in Central Europe*, Journal of Comparative Economics, Vol. 19, No. 3, 335-361.
- and Stephen PROWSE (1994), *Corporate Control in Central Europe and Russia: Should Banks Own Shares?*, Paper presented at a joint conference of the World Bank and the Central European University Privatization Project on "Corporate Governance in Central Europe and Russia", 15-16 December 1994, Washington D.C.
- EARLE, John S., Roman FRYDMAN, and Andrzej RAPACZYNSKI et al. (1993), *Privatization in the transition to a market economy: studies of preconditions and policies in Eastern Europe*, London.
- EDWARDS, Jeremy S. (1994), *The Merits of a 'Bank-Based' System of Investment Finance: What Exactly are the Lessons of Post-1945 German Experience?*, Institute of Economics, Czech National Bank, Working Paper, No. 23, Prague.
- EDWARDS, Jeremy S., and Klaus FISCHER (1993), *Banks, finance and investment in Germany*, Cambridge.
- EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD) (1994), *Transition Report*, October, London.
- (1995), *Transition report 1995 – Investment and enterprise development*, London.
- FISCHER, Klaus (1990), *Hausbankbeziehungen als Instrument der Bindung zwischen Banken und Unternehmen*, Dissertation, Rheinische Friedrich-Wilhelms-Universität, Bonn.
- FRENSCH, Richard (1994), *Gesamtwirtschaftliche Entwicklungen, Strukturprobleme, Finanz- und Kapitalmärkte in Tschechien und der Slowakei 1993/94*, Osteuropa-Institut München, Working Paper, No. 171, December.
- FRYDMAN, Roman, and Andrzej RAPACZYNSKI (1994), *Privatization in Eastern Europe: Is the State Withering Away?*, Budapest.
- FRYDMAN, Roman, et al. (1993), *The privatization process in Russia, Ukraine and the Baltic States: economic environment, legal and ownership structure, institutions for state regulation, overview of privatization programs, initial transformation of enterprises*, Budapest.
- GOLAJEWSKA, Marta, and Pawel WYCZANSKI (1994), *Rynki Finansowe: Zarys Analizy Wyników Działalności Banków Depozytowo-Kredytowych w Latach 1990-1993*, Narodowy Bank Polski, Department Analiz i Badań, Materiały i Studia, No. 41, Warszawa.
- GRAY, Cheryl W. (1993), *Evolving Legal Frameworks for Private Sector Development in Central and Eastern Europe*, World Bank Discussion Paper, No. 209, Washington D.C.
- , Sabine SCHLORKE, Miklos SZANYI (1995), *Hungary's Bankruptcy Experience, 1992-1993*, World Bank Discussion Paper, No. 1510, Washington, D.C.
- GROSFELD, Irena (1994a), *Comparing Financial Systems-Problems of Information and Control in Economies in Transition*, CASE-Foundation, Studies and Analyses, No. 26, September, Warsaw.
- , (1994b), *Financial Systems in Transition: Is there a case for a bank based system?*, Centre for Economic Policy Research (CEPR), Discussion Paper, No. 1062, London.

- GROSZEK, Mieczyslaw (1995), Role of Banks in Financing of Economic Development, Paper presented at the conference on "The Role of the Banking System in the Economic Transformation of Central European Countries", Polish Economic Society, May 18-20, Warsaw.
- HARM, Christian (1992), The Relationship Between German Banks and Large German Firms, The World Bank, Policy Research Working Paper, No. 900, Washington D.C.
- HELLWIG, Martin (1988), Kreditrationierung und Kreditsicherheiten bei asymmetrischer Information: Der Fall des Monopolmarktes, Wirtschaftswissenschaftliches Zentrum der Universität Basel, Discussion Paper, No. 8801, Basle.
- HUGHES, Joseph P., William LANG, Loretta J. MESTER, Choon-Geol MOON (1995), Recovering Technologies That Account for Generalized Managerial Preferences: An Application to Non-Risk-Neutral Banks, mimeo.
- JAMES, Christopher (1995), Equity Positions in Distressed Firms, in: SAUNDERS, Anthony, and Ingo WALTER (eds.), Proceedings of a Conference on Universal Banking, February 23-24, 1995, New York University Salomon Center, forthcoming, 420-430.
- KAWALEC, Stefan, Slawomir SIKORA, and Piotr RYMASZEWSKI (1994), Polish Program of Bank and Enterprise Restructuring: Design and Implementation, 1991-1994, Warsaw, mimeo.
- KROSZNER, Randall S., and Raghuram G. RAJAN (1994), Is the Glass-Steagall Act Justified? A Study of the U.S. Experience with Universal Banking Before 1933, American Economic Review, September, 810-832.
- JOHN, Kose, Anthony SAUNDERS, and Lemma W. SENBET (1995), A Theory of Bank Regulation and Management Compensation, New York University Salomon Center, Working Paper Series, No. S-95-1, New York.
- KOSTRO, Edward (1992), Prawo Bankowe, Biblioteka Menedzera Bankowca, Warsaw.
- LELAND, Hayne E., and David H. PYLE (1977), Information Asymmetries, Financial Structure, and Financial Intermediation, The Journal of Finance, Vol. 32, No. 2, 371-387.
- MATESOVA, Jana, and Richard SEDA (1994), Financial Markets in the Czech Republic as a Means of Corporate Governance in Voucher Privatized Companies, Center for Economic Research and Graduate Education (CERGE), Charles University, Working Paper, No. 62, Prague.
- MAYER, Collin (1987), New Issues in Corporate Finance, Centre for Economic Policy Research (CEPR), Discussion Paper, No. 181, London.
- , and Ian ALEXANDER (1990), Banks and Securities Markets: Corporate Financing in Germany and the UK, Centre for Economic Policy Research (CEPR), Discussion Paper, No. 433, London.
- MCKINNON, Ronald I. (1991), The order of economic liberalization: financial control in the transition to a market economy, Baltimore.
- (1992), Macroeconomic Control in Liberalizing Socialist Economies: Asian and European Parallels, Economics Department, Stanford University, March, mimeo.
- MEJSTRIK, Michal (1994), Czech Investment Funds as a Part of Financial Sector and Their Role in Privatization of the Economy, Institute of Economic Studies, Charles University, Reform Round Table, Working Paper, No. 14, May.

- MINISTRY OF FINANCE (Hungary) (1991), Act on securities and the Stock Exchange (Act VI of 1990 on the public issue of and trade in securities as well as on the Stock Exchange), Public Finance in Hungary, No. 64, Budapest.
- (1992), Act on Economic Associations – The Company Act (Act VI of 1988 on Economic Associations as amended and revised), Public Finance in Hungary, No. 93, Budapest.
- NAKAMURA, Leonard I. (1989), Loan Workouts and Commercial Bank Information: Why Banks are Special, Federal Reserve Bank of Philadelphia, Working Paper, No. 89-11, Philadelphia.
- (1991), Commercial Bank Information: Implications for the Structure of Banking, Federal Reserve Bank of Philadelphia, Working Paper, No. 92-1, Philadelphia.
- (1993), Loan Screening Within and Outside of Customer Relationships, Federal Reserve Bank of Philadelphia, Working Paper, No. 93-15, Philadelphia.
- NATIONAL BANK OF POLAND (NBP) (1989), The Banking Law – The Act on the Narodowy Bank Polski (31.1.1989), Warszawa.
- NORTH, Douglas C. (1992), Institutions, Ideology, and Economic Performance, The Cato Journal, Vol. 11, No. 3, 477-488.
- ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD) (1994a), Country Survey – Czech and Slovak Republics, Paris.
- (1994b), Bank Profitability – Financial Statements of Banks 1983-1992, Paris.
- PATRICK, Hugh (1995), Comments on Universal Banking Abroad: The Track Record, in: SAUNDERS, Anthony, and Ingo WALTER (eds.), Proceedings of a Conference on Universal Banking, February 23-24, 1995, New York University Salomon Center, forthcoming, 420-430.
- PAWLOWICZ, Leszek (ed.) (1994a), Restrukturyzacja Finansowa Przedsiębiorstw i Banków – Pierwszy Raport z Badania, The Gdansk Academy of Banking, Study Material, No. 44, Gdansk.
- (1994b), The Financial Restructuring of Companies and Banks in Poland and Sweden, The Gdansk Academy of Banking, Study Material, No. 1, Gdansk.
- (1995), Restrukturyzacja Finansowa Przedsiębiorstw i Banków – II Raport z Badania, The Gdansk Academy of Banking, Gdansk, mimeo.
- PEROTTI, Enrico C. (1993), Bank lending in transition economies, Journal of Banking and Finance, Vol. 17, No. 5, 1021-1032.
- PHELPS, Edmund S., Roman FRYDMAN, Andrzej RAPACZYŃSKI, and Andrei SHLEIFER (1992), Needed Mechanisms of Corporate Governance and Finance in Eastern Europe, European Bank for Reconstruction and Development (EBRD), mimeo.
- PLANECON (1995a), Third-Quarter 1995 Czech Stock Market Review: The "Third Wave" of Privatization lifts the market, Planecon Report, Vol. 11, No. 32-33, 6.11.1995, Washington.
- (1995b), Commercial Banks in Poland: Who's Best?, Vol. 10, No. 46-47, 31.1.1995, Washington D.C.
- POLISH DEVELOPMENT BANK AND MINISTRY OF FINANCE (1994) (Polish Development Bank), The Financial System in Poland 1993-1994 – A guide to the Polish Financial Sector, Warsaw.
- POLISH SOCIETY OF ECONOMIC, LEGAL AND COURT TRANSLATORS (1991), The Polish Commercial Code, Warsaw.

- PROWSE, Stephen (1995), *Corporate Governance in an International Perspective: A Survey of Corporate Control Mechanisms Among Large Firms in the U.S., U.K., Japan and Germany*, New York University Salomon Center, Financial Markets, Institutions, and Instruments, Vol. 4, No. 1, New York, 1-63.
- PURI, Manju (1995), *Commercial Banks in Investment Banking: Conflicts of Interest or Certification Role*, Stanford University, mimeo, June.
- RAJAN, Raghuram G. (1995), *The Entry of Commercial Banks into the Securities Business: A Selective Survey of Theories and Evidence*, in: SAUNDERS, Anthony, and Ingo WALTER (eds.), *Proceedings of a Conference on Universal Banking*, February 23-24, 1995, New York University Salomon Center, forthcoming, 282-302.
- SAUNDERS, Anthony (1994), *Banking and commerce: An overview of the public policy issues*, *Journal of Banking and Finance*, Vol. 18, No. 2, 231-254.
- SAUNDERS, Anthony, and Ingo WALTER (1992), *Reconfiguration of Banking and Capital Markets in Eastern Europe*, in: SIEBERT, Horst (ed.), *The Transformation of Socialist Economies*, Tübingen, 101-130.
- , — (1994), *Universal Banking in The United States*, New York.
- , — (eds.) (1995), *Proceedings of a Conference on Universal Banking*, February 23-24, 1995, New York University Salomon Center, forthcoming.
- SINGH, Ajit, and Javed HAMID (1992), *Corporate Financial Structures in Developing Countries*, The World Bank, International Finance Corporation, Technical Paper, No. 1, Washington D.C.
- STANDARD AND POOR'S (1995), *Bank Industry and Risk Analysis: Poland*, Financial Institutions Rating Service, Credit Comments, 30.11.1995, New York.
- STATE BANK OF CZECHOSLOVAKIA (SBC) (1992), *Czechoslovak Banking Acts (Act on the State Bank of Czechoslovakia, and Act on Banks of 20.12.1991)*, Prague.
- STATE BANKING SUPERVISION (SBS) (1994), *Amended Banking Act in Hungary*, Budapest.
- STEINHERR, Alfred (1995), *Performance of Universal Banks – Historic Review and Appraisal*, in: SAUNDERS, Anthony, and Ingo WALTER (eds.), *Proceedings on a Conference on Universal Banking*, February 23-24, 1995, New York University Salomon Center, forthcoming, 2-30.
- , and Pier-Luigi GILBERT (1994), *Six Proposals in Search of Financial Sector Reform in Eastern Europe*, Most-Moct, Vol. 4, No. 1, 101-114.
- STEINHERR, Alfred, and Christian HUVENEERS (1990), *Universal Banks: The Prototype of Successful Banks in the Integrated European Market? A View Inspired by German Experience*, Department des Sciences Economiques, Working Paper, No. 9001, Louvain-la-Neuve.
- , — (1994), *On the performance of differently regulated financial institutions: Some empirical evidence*, *Journal of Banking and Finance*, Vol. 18, No. 2, 271-306.
- STIGLITZ, Joseph E. (1991), *Government, Financial Markets, and Economic Development*, National Bureau of Economic Research (NBER), Working Paper, No. 3669, Cambridge MA.
- (1992), *The Design of Financial Systems for the Newly Emerging Democracies of Eastern Europe*, in: CLAGUE, Christopher, and Gordon C. RAUSSER (eds.), *The Emergence of Market Economies in Eastern Europe*, Cambridge, 161-184.

- , and Andrew WEISS (1981), Credit Rationing in Markets with Imperfect Information, *American Economic Review*, Vol. 77, No. 1, 393-410.
- SWANSON, Dan, and Leila WEBSTER (1992), Private Sector Manufacturing in the Czech and Slovak Federal Republic: A Survey of Firms, The World Bank, Industry and Energy Department, Working Paper, No. 68, December, Washington D.C.
- SZANYI, Miklós (1995), Attempts at Hardening Budget Constraints in Hungary: Conventional Exit Procedures and State Accommodation, Institute for World Economics, March, Budapest, mimeo.
- SZEGŐ, Giorgio P. (1994), Financial regulation and multi-tier financial intermediation systems, in: *Proceedings of the meeting of the EURO Working Group for Financial Modelling, Operations research models in quantitative finance*, Heidelberg, 36-62.
- TRADE LINKS (1995a), Commercial Code "Obchodní zákoník" (Act No. 513/1991 Coll. as subsequently amended), May, Prague.
- (1995b), Czech Financial Services Legislation in 1995 – Banking, Foreign Exchange and Insurance, (a) Securities Act (No. 591/1992 Coll. as subsequently amended), (b) Bond Act (No. 530/1990 Coll. as subsequently amended), (c) Stock Exchange Act (No. 214/1992 Coll. as subsequently amended), (d) Investment Companies and Investment Funds Act (No. 248/1992 Coll. as subsequently amended), June, Prague.
- THORNE, Alfredo (1993), Eastern Europe's experience with banking reform: Is there a role for banks in the transition?, *Journal of Banking and Finance*, Vol. 17, No. 5, 959-1000.
- VAN WIJNBERGEN, Sweder (1992), Enterprise Reform in Eastern Europe, Centre for Economic Policy Research (CEPR), Discussion Paper, No. 738, November, London.
- (1994), On the Role of Banks in Enterprise Restructuring: The Polish Example, Centre for Economic Performance (CEPR), Working Paper, No. 898, February, London.
- VINTON, Louisa (1995), Up by their bootstraps, *Business Central Europe*, Vol. 3, No. 21, 22.
- VITTAS, Dimitri (1991), Measuring Commercial Bank Efficiency – Use and Misuse of Bank Operating Ratios, The World Bank, Policy Research Working Paper, No. 806, Washington D.C.
- UDELL, Gregory F., and Paul WACHTEL (1995), Financial System Design for Formerly Planned Economies: Defining the Issues, New York University Salomon Center, Financial Markets, Institutions and Instruments, Vol. 4, No. 2.
- THE WALL STREET JOURNAL EUROPE (8./9.12.1995), Proposed Reform of Securities Law Brings Czechs More in Line With EU, Brussels.
- WALTER, Ingo, and Roy C. SMITH (1992), Bank Industry Linkages: Models for Eastern European Economic Restructuring, INSEAD, Working Paper No. 92/46, Fontainebleau.
- WEBSTER, Leila (1992a), Private Sector Manufacturing in Hungary: A Survey of Firms, The World Bank, Industry and Energy Department, Working Paper, No. 67, Washington D.C.
- (1992b), Private Sector Manufacturing in Poland: A Survey of Firms, The World Bank, Industry and Energy Department, Working Paper, No. 66, Washington D.C.
- WILLIAMSON, Stephen D. (1987), Costly Monitoring, Loan Contracts, and Equilibrium Credit Rationing, *The Quarterly Journal of Economics*, Vol. 52, No. 1, 135-145.

- WOLFF, Samuel, Paul THOMPSON, and Daniel NELSON (1992), Securities Regulation in Central Europe: Hungary and Czechoslovakia, *Denver Journal of International Law and Policy*, Vol. 21, No. 1, 103-148.
- WYCZANSKI, Pawel (1995), *System bankowy w Polsce, 1990-1994*, unpublished, Warsaw.