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The Role of Financial Institutions in the Transition to a Market Economy

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Policymakers in the formerly centrally planned economies face the formidable task of creating functioning market economies in environments in which market mechanisms have been suppressed for decades. In this task policymakers face a conflicting set of objectives: although the transformation toward a market economy implies that the government should withdraw from its dominant role in the economy, a multitude of new tasks exists for which government action is needed. The development of a market-based financial system is such a task. These economies already possess significant concentrations of specialized productive capacity for which the kinds of informal sources of finance that characterized early capitalist development in the developed market economies are insufficient. Yet they lack most of the important institutions of market economies: competitive markets for most factors, goods, and services; a well-capitalized and competitive financial system; and the legal and regulatory framework to safeguard the financial system.

This paper analyzes the role of different financial institutions—banks, capital markets, and investment funds—in the transformation from a planned economy to a market economy. It has been generally agreed that essential elements of this transformation are price liberalization and the privatization of a significant proportion of the existing productive capacity. While some progress has been made on the first front, privatization has proceeded very slowly in most of

¹The views expressed in this paper are those of the authors alone and do not necessarily represent those of the Organization for Economic Cooperation and Development or the International Monetary Fund.

the economies in transition. However, for privatization to succeed at all in improving enterprises' efficiency, the system of central control over enterprise management must be replaced by another mechanism that not only provides managers with the resources they need to finance restructuring but also gives them the incentives to respond to market prices in the most efficient manner feasible. Market-based financial institutions play a key role in achieving these objectives.

The financial system inherited from the system of central planning is in a poor state. The banking systems in most of the formerly centrally planned economies are plagued by low capital, large stocks of nonperforming loans to state enterprises, loan portfolios that are concentrated both geographically and sectorally, small branch networks for other than the savings banks, and managers that have little experience in appraising loan applications and in measuring and managing risks. Equity and bond markets are either nonexistent or extremely small and illiquid, and both the small- and large-value payment systems are incomplete and inefficient. In this environment, payments are frequently made on a cash or barter basis and firms have created extensive networks of interenterprise credits. Yet the process of transformation from central planning to a market system, and especially the privatization of state enterprises, will place tremendous demands on the financial system.

Given this environment, we attempt in the paper to identify the priorities for financial sector reform. One approach argues that the structural problems in the banking sector are so serious that they cannot soon be resolved and that the authorities should therefore first concentrate on developing the nonbank financial sector. In an extreme exposition of this view, McKinnon (1992) argues that banks should be prohibited from lending to privatized firms in the early stage of the transformation and should be allowed to make only fully collateralized short-term lending in the later stage. Other writers similarly argue that the introduction of a secondary market for equity cannot wait for the completion of the restructuring of the banking sector. In contrast, Brainard (1990), for example, argues that reforms should begin with the commercial banking sector. Corbett and Mayer (1991) and Saunders and Walter (1992), among others, go even further to argue that reforms should be based on the principle of creating a bank-dominated system following the models of continental Europe or Japan.

This paper argues that the highest priority must be given to the restructuring and privatization of the banking sector. In market economies, banks are the principal source of firms' short-term working

capital and provide highly liquid investments in which firms can store receipts. They are also the principal source of human capital trained in evaluating credit risk and therefore provide the basis for ensuring an efficient allocation of financial resources.² This financial efficiency is translated directly into improved efficiency in production and therefore in welfare generally.

The structure of financial markets also argues strongly for giving priority to banking reform. Banks' access to "good funds" from the central bank provides liquidity that maintains confidence in the payment system, which in turn facilitates trade in commodities and in financial assets. Moreover, the readiness to provide liquidity as a "lender of first resort" to other financial institutions, including securities firms and private clearinghouses, places banks at the heart of the financial system.

However, the primacy of ensuring the health of the banking sector does not imply that the development of securities markets, for example, is of little significance. The development of government securities markets is an important consideration in economies in transition with high budget deficits and is also important from the point of view of promoting money markets. In addition, the initial allocation of assets arising from privatization may not coincide with the desired distribution—particularly from the point of view of corporate control. Secondary markets for equity provide a way for individuals' holdings of shares to be reallocated and their demand for liquidity satisfied. More fundamentally, true privatization—the transfer of ownership and management of firms from the public to the private sector, leading to effective private control of the businesses—can only be said to have occurred if shares in firms can be treated as private property to be bought and sold at will. But in the environment of great uncertainty that characterizes transformation, equity markets cannot be expected to provide significant sources of new capital. More important, securities markets rely heavily on banks as participants and as providers of liquidity to function efficiently. Therefore, even the secondary markets will be hampered if the banking system has not first been thoroughly restructured.

Therefore, assuming government resources and expertise are not unlimited, the first priority for action must be the restructuring of the banking system. Banks must be relieved of their inherited asset prob-

²Bank lending is not completely efficient, however. Informational asymmetries between banks and potential lenders can result in credit rationing. However, these kinds of inefficiencies are endemic to the financial system and are generally just as problematic for nonbank financial intermediaries.

lems, recapitalized, and provided with incentives to operate as profit-oriented, competitive institutions. Considerable resources must be devoted to the training of bank personnel and the installation of accurate accounting, risk evaluation, and management practices. Other important priorities are the establishment of an efficient large-value payment system and the implementation of effective banking regulation and supervisory regimes. It should be recognized from the outset that these tasks will be time-consuming. Although secondary markets for debt and equity should not be repressed, neither should their development be considered a priority. The authorities' role in the early development of the nonbank financial sectors should be confined to establishing the legislative and regulatory conditions for their operation.

These considerations set, in broad terms, the agenda for financial sector reform in the formerly centrally planned economies and the role of a market-based financial system in the transformation process. However, an active institution-building role by the government does not mean that it is possible or desirable to construct an "optimal" set of market institutions and rules. In market economies, financial institutions reflect largely the needs of the private sector, which differ across countries and change over time; this implies that there is no unique blueprint that can be transplanted to the economies in transition. It is the role of the public authorities to lay out clearly the principles and rules governing the safe and efficient operation of the financial system and to enforce these rules.

The next section discusses the role of the banking sector in allocating financial resources and in supporting securities markets. The following section outlines the corporate control function of the financial system, which is largely missing in the economies in transition and which is essential to the creation of a market-based system. The role of banks and capital markets in providing a market-based system of corporate governance is also discussed. Then the potential contributions of universal banks, capital markets, and hybrid investment funds are evaluated and recent developments in formerly centrally planned economies—Poland, Hungary, and the Czech and Slovak Republics—are discussed and related to the previous discussion. The final section briefly sums up.

Role of the Banking Sector

One of the core challenges facing the formerly centrally planned economies is the decentralization of financial resource allocation.

Indeed, part of the economic motivation for the transformation to a market system in the first place has been the recognition that central planning did not result in an efficient allocation of capital and that physical resources were therefore not directed to their most productive uses. The essence of the market in this respect is that it minimizes the extent to which noneconomic factors influence the allocation of resources, and thereby improves such allocation as well as, ultimately, the productivity of investment.

The central issue to be decided is what will replace the planning mechanism in the intermediation between economic units with surplus financial resources and those with insufficient capital to finance their investments. In the industrial market economies, this intermediation has traditionally been dominated by the banking sector.³ Competition with other banks and with nonbank intermediaries forces banks to develop expertise in credit risk evaluation and in the identification of the most profitable investments. In doing this, they acquire valuable information about borrowers and lenders alike, which allows them to identify the most profitable investments. In recent years in certain industrial countries the dominance of banks as financial intermediaries has been reduced somewhat with the emergence of nonbank intermediaries and the further development of corporate debt markets, which give firms direct access to individual savings. However, the development of these institutions and markets depended to a considerable degree on the expertise and practices—credit risk measurement for example—developed by the banks. Moreover, in these economies, the financing of smaller enterprises—which dominate most economies

³However, the most important source of finance has historically been retained earnings rather than external finance. Of the external sources of finance—loans, equity, and bonds—bank loans have generally been the most important. Even though Taggart (1985) provides evidence that in the United States internal funds appear to account for a smaller proportion of total financing today compared with earlier decades this century, this proportion remains above 50 percent. The share of financing accounted for by stock issues has also declined, from 19 percent in the 1930s and 1940s to 5 percent of less in the postwar period. Mayer (1989) provides evidence that bank loans accounted for at least 40 percent of gross financing of nonfinancial enterprises in France, Italy, and Japan, and over 20 percent in Germany, the United Kingdom, and the United States during 1970–85. Bonds, equity, and other short-term securities contributed less than 13 percent of gross financing over this period in all of these countries. Retained earnings accounted for at least 30 percent—more than 65 percent in the United Kingdom and the United States—of gross financing. On the other hand, Singh and Hamid (1992) find that large corporations in developing countries rely on retained earnings to a considerably lesser extent—and on equity issues to a considerably greater extent—than is apparently true for industrial country firms, although there may be a firm size bias in their data.

in terms of their contribution to employment and output—is still generally performed by banking institutions.

Although it is not necessary for the formerly centrally planned economies to repeat the historical development of financial markets elsewhere, it is nonetheless true that securitization and nonbank institutions are unlikely to compete strongly with the banking sector in these countries during the transformation period. For the most part, the population is inexperienced in making the kinds of financial decisions required of direct financing of enterprises. Nor does the judicial system yet have experience in adjudicating financial conflicts that may arise between bond holders and debtor enterprises. For example, most of the economies in transition (except Poland, which has recently prepared draft legislation on secured lending) still lack laws on securitized lending, which provide for a central registry of collateral and protection of creditors' claims on pledged assets. In addition, insurance and pension funds, often the most important nonbank financial institutions, are relatively small in these economies and need restructuring. While steps should certainly be taken toward making these funds fully funded and freeing up their investment opportunities, they are unlikely to provide a significant source of capital in the immediate future. One important class of nonbank financial institutions is the investment funds that have emerged in the Czech and Slovak Republics, for example, out of their voucher privatization programs. These are discussed below.

Moreover, the economies in transition have underdeveloped payment systems—both retail and large-value systems—which are generally provided by banks. The improvement in these systems is an important objective in the overall restructuring of the financial system.⁴ However, to provide security in these systems, it is important to ensure that the participants are creditworthy—that is, that the banks that have access to these systems are well capitalized and have portfolios that are not excessively risky. Indeed, one of the motivations for bank regulation is the protection of the payment system.

However, the development of a competitive banking sector in the economies in transition is fraught with many structural obstacles.⁵

⁴See Folkerts-Landau, Garber, and Lane (1994) for a discussion of payment system reform in formerly centrally planned economies.

⁵The creation of a perfectly competitive banking system is, of course, not the objective. Because of banks' importance to the real economy and because the failure of a large bank can have consequences for the rest of the financial system and the real economy, and because in many jurisdictions bank deposits are insured by governments, in no country are banks subject to perfect competition. Capital and liquidity

The most immediate problem is that many of the employees of state-owned banks have little or no experience in judging the creditworthiness of loan applicants or of measuring the credit risk to which the bank is exposed. Therefore they lack the basic expertise needed by a market-oriented commercial bank. In addition, these banks are frequently highly segregated geographically and, except for the traditional savings banks, have limited branch networks. Moreover, under central planning, banks did not have to compete for deposits or in the market for loans and so have little experience in marketing or in pricing their products.

Bank Recapitalization and Privatization

The characteristic of banks in the formerly centrally planned economies that has attracted the most attention—probably rightly so—is the nature of their portfolios. As a consequence of the banks' regional focus, their loan portfolios are frequently concentrated geographically or by industry, resulting in overexposure to the risk of relative economic decline in a given region or sector. In addition, their balance sheets often reflect very specialized activities that they were given under the previous regime. For example, it is common for a country in transition to have a savings bank and a development bank and perhaps sector-specific banks servicing, for example, agriculture or housing (see Table 1). Consequently, for example, the savings bank's liabilities may be dominated by retail deposits, and its assets may be dominated by loans to other banks, which would be the primary source of funds for the latter institutions.

Perhaps the most serious obstacle to the efficient functioning of the banking system is the "bad loans" problem (see Table 2). Many banks have large stocks of nonperforming loans outstanding to state-owned enterprises. For example, as much as 26 percent of the assets of the banking sector in Poland were thought to be nonperforming in 1992, whereas for the former Czechoslovakia and Hungary the corresponding estimates were 21 percent and 11 percent, respectively.⁶ The proportion of bad loans is highest in the state-owned banks. Undercapitalized banks with large exposures to virtually bankrupt large enterprises may be inclined to roll over outstanding loans and to capi-

requirements and the need to obtain a banking license limit competition in the industry. Moreover, banks' activities in individual markets are generally restricted (for example, prohibitions against underwriting securities issues and position limits in foreign exchange dealing).

⁶In May 1993, 19 percent of the assets of all banks in Poland were reported to be nonperforming.

Table 1. Structure of the Banking System in Selected Central European Countries

	Former Czechoslovakia	Hungary	Poland	Bulgaria	Romania
State-owned commercial banks ¹	2	4	9	59	4
State-owned foreign exchange banks ¹	3	1	3	1	1
State-owned savings banks ¹	2	1 ²	1	1	1
Other state-owned, specialized banks ¹	1	11	3	8	1
Private sector banks (of which: have foreign stake) ³	43 (18)	38 (15)	72 (7)	7 (3)	9 (5)
State-owned banks' assets as percentage of total banking system assets	43 (1991)	85 (1993)	20 (1993)	...	80 (1992)
Household deposits as percentage of savings bank deposits	100 (1990)	80 (1987)	30 (1993)	100 (1990)	90 (1992)

Sources: Official government reports and documents.

¹Number at time of creation of two-tier banking system.

²Excluding savings cooperatives.

³Most recent data; number excludes representative offices. For former Czechoslovakia includes five privatized banks.

talize interest rather than force enterprises into bankruptcy or restructuring. The assumption that loans to state-owned enterprises are backed by the state relieves banks of the need to consider the creditworthiness of their clients. This moral hazard problem undermines the banks' ability to provide an objective assessment of corporate profitability and to ensure that resources are distributed efficiently and argues in favor of a thorough restructuring and recapitalization of the banks.

While there are a variety of options for relieving the banks of these nonperforming loans, they generally include some form of conditional "bailout" or other use of government funds to recapitalize the banks.⁷ At the same time, the restructuring of bank portfolios to relieve their exposure to nonperforming loans can be used to correct any structural imbalance in the geographical or sectoral composition of their portfolios. The key to a successful bank recapitalization is that it is accompanied by credible measures to ensure that, once relieved of their bad assets, banks shift toward commercial lending behavior based on risk-return criteria. This means that solutions to the bad assets problem that rely on explicit or implicit guarantees to the banks (and enterprises) that their future losses on nonperforming loans to enterprises will be covered by the state budget are to be avoided or terminated. Cleaning up bank portfolios without changing the incentive structure in which they operate will impede banks' conversion to behaving as market-based entities and will allow the bad debt problem to resurface quickly.

There are two main approaches to the financial restructuring of the banks, which have different implications for the corporate governance function of the banks in the initial stage of the privatization of the real sector (see Table 2). The decentralized approach—adopted in Poland—relies on the banks themselves to manage the debt restructuring, usually by creating a separate loan workout department. Consequently, the banking sector would be given a central role in the restructuring of state-owned enterprises. The danger in this approach lies in the relatively weak position of the banks. While they may have the power to force firms into bankruptcy if they cannot reach agreement on how to restructure the firm and its finances, as happens in the Polish scheme, they may also have the same incentive as under the previous regime to continue lending to these firms in the hope that they can "grow out" of the problem. Moreover, this approach requires banks to devote significant amounts of human capital to

⁷For a discussion of how to resolve the bad loans problem, see Fries and Lane (1994).

Table 2. Balance Sheet Restructuring and Bank Privatization in Selected Central European Countries

	Former Czechoslovakia	Hungary	Poland	Bulgaria	Romania
Loan classification	Standard, substandard, suspicious, nonperforming (1992)	Standard, substandard, doubtful, bad (1991)	Pass, substandard, doubtful, loss (1992)	Only past due payments are classified	...
Required loan loss reserves	Substandard—20 percent Suspicious—50 percent Nonperforming—100 percent	Substandard—20 percent Doubtful—50 percent Bad—100 percent	Substandard—20 percent Doubtful—50 percent Loss—100 percent	Determined by the central bank	...
Incentives for loan loss reserve creation	Two percent of average medium- and long-term credit and 10 percent of overdue credits can be deducted from gross profit	Loan-loss reserve creation from pre-tax profits	Reserves can be set aside from pre-tax profits only for loans which can be proved to be non-recoverable	Banks can set aside a maximum of 30 percent of pre-tax profits to cover principal, but there is no ceiling on reserves set aside to cover capitalized interest	...
Amount of problem assets (local currency)	Suspicious—Kčs 55 billion (1992) Nonperforming—Kčs 75 billion (1992)	Bad—Ft 125 billion (1992) Doubtful—Ft 90 billion (1992) Substandard—Ft 50 billion (1992)	Lei 122 billion (end-1990)

<p>Problem assets in (a) all banks; (b) state-owned banks (in percent of total)</p>	<p>(a) all banks: 21 per- cent</p>	<p>(a) all banks 11 per- cent (1992) (b) four largest state- owned banks: 15 percent (1992)</p>	<p>(a) all banks: 26 per- cent (1992); 19 per- cent (1993) (b) nine state-owned commercial banks: 30-60 percent (1992)</p>	<p>...</p>	<p>...</p>
<p>Balance sheet restructuring of state-owned banks</p>	<p>Kčs 110 billion of revolving inventory loans (pre-1990) transferred to newly established state- owned Consolida- tion Bank in 1991 along with some associated bank liabilities</p>	<p>Government guar- anteed Ft 10.5 billion pre-1987 enterprise debt (1991); restricted dividend policy (1991-92); Ft 102.4 billion in bad assets (loans that were 360 days past due, or loans made to bankrupt or liquidated com- panies) were trans- ferred to newly established state- owned fund, Hun- garian Investment and Development Co. (HID) in March 1993</p>	<p>Doubtful and loss assets are trans- ferred to separate workout units in each bank. The Law on Mutual Settle- ment of Debt pro- vides for a secondary market for loans, and for debt-equity swaps (effective 1993)</p>	<p>Government guar- anteed the principal and interest pay- ments on all nonper- forming pre-1991 loans to state-owned enterprises plus interest capitalized since end-1990</p>	<p>Corporate debt: lei 280 billion written off against govern- ment deposits in banks (1990); lei 125 billion refi- nanced by central bank (1990); lei 135 billion (pre-1990 debt) written off (1991); agricultural debt: lei 65 billion of 1984-88 debt writ- ten off against gov- ernment deposits (1990); lei 111 billion (1989-90 debt) writ- ten off (1992)</p>

Table 2 (concluded).

	Former Czechoslovakia	Hungary	Poland	Bulgaria	Romania
Recapitalization of state-owned banks	Kčs 50 billion of five-year state bonds carrying market interest rates transferred to banks in conjunction with loan transfers to Consolidation Bank (1991)	HID issued Ft 82 billion in 20-year bonds with interest rate linked to 90-day treasury bill rate to banks in conjunction with asset transfer covering 50 percent of pre-1992 bad assets, 80 percent of 1992 bad assets, and 100 percent of claims on state-owned enterprises named by the State Property Agency (1993)	The Law on Financial Restructuring of Enterprises and Banks (March 1993) proposes to recapitalize banks by issuing zloty-denominated Treasury bonds redeemed with funds from the Polish Bank Recapitalization Fund, which was recently converted from the \$1 billion exchange stabilization fund established in 1990. To be eligible for recapitalization the bank must: (1) obtain a financial audit; (2) isolate non-performing loans in a workout department; (3) submit a	Leva 5 billion (the maximum allowable annually) in state bonds carrying an interest rate of one-third of the base rate transferred to banks in conjunction with write-off of nonperforming assets (1992)	Government provided lei 95 billion in capital transfer (1991-92)

loan portfolio
restructuring plan to
the Ministry of
Finance

Bank privatization strategy	Banks included in the mass privatization by voucher program (1992) State retained 37–53 percent stake	Target ownership structure: foreign = 25 percent, state = 25 percent, portfolio investors = 50 percent by end-1996	For the nine state-owned commercial banks the target ownership structure is foreign investors = 20–25 percent, state = 30 percent, employees = 10 percent, portfolio investors = 35–40 percent. For other state-owned banks privatization is on a case-by-case basis	Consolidation of 58 small banks into 6 large banks in 1992–93; privatization expected to begin in 1994	All banks except Savings Bank included in mass privatization (1992); state retains 70 percent stake through State Ownership Fund
Banks privatized	5	—	2	—	—

Sources: Official government reports and documents; *The Hungarian Economy*; *Central European*; Clifton and Khan (1993).

correcting problems inherited from the past rather than to improving current lending practices.

In contrast, a centralized approach essentially relies on the transfer or sale of bad assets to a central entity, generally a government-sponsored institution created specifically for this purpose. Usually, a portion of the bank's liabilities would also be transferred to this institution. This approach envisages a role for the banks only after the financial restructuring—and possibly privatization—of the state-owned enterprises, to avoid a situation in which banks continue lending to insolvent state-owned enterprises whose debts are thought to be guaranteed by the state. Moreover, the decoupling of bank reform and enterprise restructuring will help banks put their once subservient relations with state-owned enterprises on a sound commercial footing. This suggests that bank recapitalization and restructuring should precede enterprise restructuring. Not only would this help prevent a recurrence of the bad loans problem, but placing bank lending on a firm commercial basis would also support the imposition of a hard budget constraint on state-owned enterprises. The newly restructured and recapitalized banks are in a position of strength vis-à-vis enterprises that are to be, or have been, privatized, in that they can impose financial discipline. In other words, the capacity to influence management has increased; for example, it would now be easier for banks to refuse new loans to enterprises that show insufficient willingness to restructure.

Regardless of how the bad loans problem is handled, however, the banks can only be expected to operate on a purely market-oriented basis if they themselves are privatized. As long as they remain state owned, the possibility that credit allocation decisions will be tainted by political considerations persists. Banks can only enforce market behavior on their customers if they themselves operate in a competitive market environment. While the economies in transition have begun to privatize banks, progress to date has been very slow (see Table 2). Meanwhile, the absence of strict licensing requirements in some of the economies resulted in the emergence of literally thousands of small privately owned banks in Central and Eastern Europe. Unfortunately, these banks tend to be seriously undercapitalized and undersupervised and are often simply financial agents for the enterprises that own them and have themselves accumulated significant amounts of nonperforming loans, to the point of becoming insolvent. Although consolidation of private banks has begun, notably in Russia and Poland, much more needs to be done if these institutions are to provide healthy competition for the (formerly) state-owned banks.

Before bank privatization—and perhaps even restructuring—is undertaken on a significant scale, it is important to ensure that the general environment under which the banks will operate is specified. While it is surely not necessary to pass an entire range of detailed financial laws, the broad parameters outlining admissible banking activities and responsibilities should be declared. One important aspect of this environment is the question of whether, and how, banks will be involved in securities trading; this question will be taken up later. Another important element of this environment is the possibility that bank deposits will be insured. As is well known, deposit insurance can create incentives on the part of bankers to take excessive risk, since they may not bear the full consequences of bad decisions. It is important to send a clear message that bank shareholders and managers are fully responsible for both their successes and failures by committing to a regime in which they will be the first to suffer losses if their banks fail.

Finally, transformation itself generates risks and uncertainties that need to be taken into account in market-based lending decisions. Even in the initial stages of the post-privatization period (after both banks and enterprises have been financially restructured), the role of banks in providing fresh funds may be modest without government involvement. The recent experience in Germany is instructive in this regard. German banks have demanded guarantees to keep credit flowing to firms in the former East Germany. Whereas it was initially expected that equity markets would play a role in the (post-)privatization process, their contribution was negligible (for example, venture capital funds contributed less than 1 percent of the financing). Since there was no substitute for bank funding in the restructuring and privatization process, government guarantees to the banks were provided (OECD, 1993c). Likewise, many bank loans granted in formerly planned economies in support of privatization are part of government-sponsored programs. The loans are extended by the commercial banks, but they are all refinanced by the central bank. Although this type of government intervention could be justified on the grounds of information externalities (see Nakamura (1993) for a general discussion), the provision of "soft loans" runs counter to the objective of developing a banking culture in which loans are provided on market terms.

Market Structure and the Role of Banks

Although it has been argued above that in the formerly centrally planned economies the banks' role in providing finance to enterprises is compromised by their inherited portfolio problems and lack of

experience with market-based lending, it is nonetheless true that emphasis should be placed on improving the position of the banks rather than supporting alternative institutions. This conclusion is based in part on the observation that a sound, competitive banking system lies at the heart of any efficient securities market. Securities market participants rely heavily on bank credit to ensure liquidity in these markets; and the creation of securities markets in an economy with a weak banking sector will unduly increase systemic risk.⁸

Securities markets can be segregated for discussion between the primary markets in which the securities are issued, and the secondary market in which they are traded among investors. It is by means of an issue in the primary market that firms raise capital. However, firms are not entirely ambivalent about the development of the secondary market. The greater the liquidity in the secondary market, and the greater the information available to participants, the more efficient will be the price discovery process and therefore the more reliable will be these prices as indicators of how new issues should be priced. Moreover, a liquid secondary market increases the range of potential primary market investors by improving the maturity transformation role of the market. Investors wanting short-term assets will be prepared to purchase long-term bonds if they are confident that they can sell them on the secondary market when they want to.

Banks' involvement in the primary markets is both direct and indirect. In many formerly centrally planned economies, banks are permitted to underwrite security issues either directly or through subsidiaries. However, even if this is not permitted, underwriters will often turn to banks for credit. The underwriters' demand for credit stems from their need to hold securities during issue, to support prices immediately after the initial issue, and to hold undistributed securities.

In the secondary market, the same considerations apply. Brokers will on occasion need to accumulate large amounts of stock to satisfy a block purchase, or sell off large blocks piecemeal, for which they may need short-term credit. In addition, large purchases are often made with funds borrowed from the brokerage. The broker itself may acquire the funds by drawing on a line of credit with a bank.⁹ Dealers will demand

⁸Systemic risk is loosely defined as the possibility that a failure of one financial institution will lead to failures of other institutions with which it has had dealings, with the result that the flow of financial payments is significantly restricted.

⁹The bank may be unwilling to lend directly to the individual investor because the loan would be backed only by the securities purchased, whose value may fluctuate significantly. However, a loan of the same amount to the broker would be backed by the broker's more extensive securities and capital, making default less likely.

credit to finance their proprietary positions and to facilitate the buying and selling required of them in their role as market makers.

In securities exchanges, banks are relied upon to provide same-day "good funds" to finance margins. In addition, brokers and dealers will need access to credit to manage settlement delays or failures. The exchange clearinghouses themselves will need to maintain borrowing rights to protect the market against defaults by one or more members of the exchange. Obviously, the potential demand for bank credit can be reduced by requiring brokers and dealers and securities exchanges to maintain larger reserves. However, to ensure that temporary liquidity shortages do not result in the complete collapse of the securities markets, lines of credit will be needed to provide support in very large settlement failures. It must be possible to draw on these lines of credit immediately upon recognition of a problem. This generally means that the potential creditor needs to be an institution with access to same-day central bank funds, which is generally restricted to the commercial banks that participate in the large-value payment system.

Clearly, the development of securities markets cannot be considered in isolation from the health of the banking sector. It is important to ensure that the banks that provide credit to securities market participants are able properly to assess the risks involved. They must have expertise in securities market trading to understand the transactions they are ultimately financing, and they must be able to assess the credit risks involved. Finally, banks' exposure to securities market lending should be monitored.

This discussion suggests that the banks' restructuring and recapitalization should precede their involvement in securities markets. The introduction of securities markets and the necessary creation of lines of immediate credit with highly variable amounts of credit actually being demanded will greatly increase systemic risks if the banks providing these credit lines are themselves undercapitalized and illiquid. This suggests, however, that the development of the securities markets will itself be constrained by the progress in bank restructuring.

Financial Structure and Discipline

Privatization and Separation of Ownership and Control

Among the fundamental challenges of the transformation period is the privatization of state-owned enterprises. Financial institutions are expected to play many roles in privatization. First, they may be expected to play an important role in the restructuring of state-owned

enterprises awaiting privatization. Second, they are expected to mobilize domestic and foreign funds and make them available for financing ownership transfers to the private sector as well as to provide working capital and investment finance to enterprises after they have been privatized. Third, financial institutions will provide financial advice and other specific services, for example, payment services. Finally, as will be argued below, financial institutions play an important role in the monitoring and control of managerial activities.

Privatization policy faces many challenges: the huge numbers of firms and individuals involved, the considerable difficulty in valuing enterprises, underdeveloped capital markets, the need to restructure enterprises, conflicts about the fairness of the different privatization schemes, administrative bottlenecks, a weak banking sector, and legal uncertainties.¹⁰ Different privatization strategies have been adopted in the various economies in transition reflecting, *inter alia*, differences in starting points, political concerns about equity, and other country-specific considerations. However, in broad terms, the objectives are similar: a speedy transfer of property rights resulting in effective private control of the privatized enterprises by the new owners.

These considerations prompted the authorities in the economies in transition to adopt multitrack approaches to the privatization of large enterprises by using combinations of the following basic methods (Blommestein, Geiger, and Hare, 1993): (1) public offering of shares; (2) sales of shares to a private buyer or group of buyers; (3) free distribution of shares to the employees or population (for example, direct transfers of shares, distribution through vouchers, and distribution through intermediaries); (4) restitution to former owners; and (5) buy-outs, buy-ins, and other forms of "bottom-up" or "insider" privatization.

For example, the Hungarian approach to privatization has favored methods (1), (2), (4), and especially (5), whereas the Czech and Slovak Republics pioneered the mass privatization approach (3). Other formerly centrally planned economies, Poland, Romania, and Russia, for example, have also proposed voucher privatization programs.

The different methods employed in privatization emphasize different financial institutions. In each country, banks have been playing, or will be expected to play, a significant role in the restructuring of the enterprises both before and after privatization. In Poland, for example, the restructuring of enterprises is to be carried out by the banks

¹⁰For recent discussions of privatization in the economies in transition, see OECD (1993a) and Earle, Frydman, and Rapaczynski (1993).

as part of their own restructuring and recapitalization. Where adopted, voucher privatization has resulted in the creation of investment funds that hold concentrations of shares in privatized firms, and provides for broad participation by the population through ownership of interests in investment funds. The implementation of methods (1), (2), and (3) creates an immediate demand for the creation of a secondary market in equity.

The challenge will be to ensure that privatization of enterprise ownership results in market-oriented behavior on their part. One of the important characteristics of a market economy is that it includes a set of rules and institutions that promote the efficient allocation of resources. In market economies characterized by many large enterprises in which managers may not be the sole or even the most important owners, this allocation mechanism needs to provide the proper incentives for managers to respond rationally to information conveyed in market prices, while simultaneously limiting their incentive to act in ways that are detrimental to the interests of creditors and shareholders. Central to this mechanism is the maintenance of effective corporate control, which itself relies to a large extent on the existence of private property rights and market-based financial institutions. These market-based control mechanisms are missing in the formerly centrally planned economies.

Consequently, an important goal of privatization is to ensure that the transfer of property rights from the state to the private sector is combined with the development of institutions and rules that provide an effective corporate governance structure in an economy dominated by private agents. The concept of "effective corporate governance" is based on an understanding of the institutions and rules that govern the allocation of resources in a market economy. A proper understanding of the factors that shape the structure of corporate control in market economies is fundamental to the analysis of the role of financial institutions in the process of transformation, including privatization.

Agency Problems in Privatized Firms

The broad distribution of shares in privatized firms and asymmetries of information between the managers of the firm, its shareholders, and its creditors creates the potential for conflicts between these groups in which one group attempts to increase its own welfare at the expense of the welfare of the others. Shareholders and creditors run the risk that managers will take actions that reduce the value of either or both of these claims, while if shareholders have some

control over the firm, they may take actions that increase the value of their claims at the expense of the value of the firm's debt ("asset substitution"). These conflicts can fruitfully be discussed in terms of a principal-agent model in which, for example, the manager acts as the agent for the principal (shareholders or creditors).¹¹ The essence of such conflicts is the inability to observe other parties' actions combined with a divergence of interests. If access to information is asymmetric among managers, shareholders, and creditors, such conflicts cannot generally be contracted away entirely.

Agency conflicts are costly to the firm because they can result in suboptimal investment decisions. For example, the less protection creditors have against asset substitution, the less willing they will be to lend to the firm, resulting in an increased cost of capital. Likewise, investors will be less willing to purchase equity if they cannot prevent managers from appropriating more than their agreed share of profits.

The conflict between managers and investors can be alleviated by providing creditors and shareholders with a mechanism for monitoring the behavior of the agent. Provided this monitoring ability is combined with an enforcement mechanism, second-best contracts can be designed that reduce the agency cost. In a centrally planned economy these agency costs are reduced because the state is the only shareholder and, in theory, dictates instructions to the managers and is able to verify both that these instructions are carried out and that their reported effect is accurate. The challenge of privatization is to replace this direct monitoring and control by the state with market-based mechanisms.

This provides the basic rationale for the corporate control function of financial institutions.¹² The challenge is to create an incentive structure in which the interests of the managers, shareholders, and creditors can be reconciled or the conflicts controlled. Three classes of resolution of the principal/agent problem exist: using product and labor markets to reward or punish managers' behavior; changing the firm's capital structure; and introducing direct control mechanisms to enforce efficient behavior. The precise structure of corporate control is, therefore, dependent on a number of interrelated factors, including (1) shareholders or debt claimants; (2) the legal infrastructure, in particular, the type of bankruptcy rule and other asset restructuring rules such as loan workouts; (3) the relative importance of the bank-

¹¹The application of principal/agent methodology to corporate finance was initiated by Jensen and Meckling (1976). See Barnea, Haugen, and Senbet (1985) for a review of agency theory.

¹²See Harris and Raviv (1991) and Holmstrom and Tirole (1989) for surveys of the literature on corporate control mechanisms.

ing system (vis-à-vis the capital market) in long-term lending to large enterprises and equity holdings by banks; (4) the presence and role of large shareholders; and (5) the composition and structure of enterprise boards.

Despite the fact that one can identify some basic forces that shape the general framework for corporate control by financial institutions, understanding of these mechanisms remains limited. Moreover, the (endogenous) outcome of the interaction between these factors—the management of large enterprises and other economic agents—is impossible to predict. However, a brief discussion will provide a number of insights that will be helpful in analyzing the role of financial institutions in the transformation.

One approach to controlling managerial behavior is to give managers an incentive to act in the interests of the owners by linking their income to the firm's performance. Thus, for example, they can be given shares or stock options that link a significant portion of their income to the market value of the firm. However, in the highly uncertain environment of the economies in transition, the market value of the firm will be affected by systematic uncertainty unrelated to the performance of the manager. Therefore, the direct link between the actions of the manager and the value of the stock is weakened, which increases the agency cost. Moreover, linking managerial compensation to current stock value can cause a certain myopia on the part of managers.

Along similar lines, managerial discipline has been linked to the labor market for managers.¹³ It is argued that a desire to maintain a reputation as an effective manager—and thereby retain access to alternative employment opportunities—induces managers to increase their effort.¹⁴ If so, they have an incentive to ensure good performance by the firm, since it provides them with a reputation for excellence. However, in the formerly centrally planned economies, this mechanism will be weakened as it will be difficult to identify the degree of the manager's responsibility for the success or failure of the firm.

Capital Structure and Discipline

The capital structure of the firm itself provides one source of control. A debt contract carries an obligation to make regular interest

¹³This argument was made by Fama (1980).

¹⁴Managerial "effort" is broadly interpreted to mean the total of their activities and the quality of their decisions affecting the operation of the firm.

payments, and failure to meet this obligation allows the creditor to force the firm into bankruptcy or liquidation. This can exert a disciplining effect on management, since a manager of a highly indebted firm who wants to avoid bankruptcy will expend more effort to avoid low profits.¹⁵ If managers own stock in the firm, they have a share in all profits earned in excess of interest payments and therefore have an additional incentive to increase their effort. Moreover, an increase in debt decreases the free cash flow (net return to the project minus interest payments), thereby reducing the extent to which managers can appropriate corporate earnings to increase their own welfare.

Loan contracts also give banks an incentive to monitor closely the behavior of the managers and the firm's performance to ensure that the loan is repaid and to avoid being forced to continue lending to large firms that threaten to default on their obligations. In addition, a bank can choose to cut off the firm from future lending if it considers the bank a poor credit risk. This is a potentially important sanction because, in evaluating the loan application, the bank has access to confidential information about the firm's prospects. Therefore, an announcement that access to credit is being suspended sends a very strong negative signal to other potential lenders to the same enterprise.

The effectiveness of debt in promoting managerial effort is limited, however, since the manager of a highly indebted firm also has an incentive to engage in asset substitution. For example, once the terms of debt contracts are locked in, investments in projects with greater return variability would shift wealth from bondholders and other creditors to shareholders. Several instruments or institutions have been developed to counter this problem, thereby reducing the potential conflict between debt and equity holders: (1) the inclusion of debt covenants to restrict asset substitution (for example, limits on dividends and new borrowing, and constraints on the use of funds); (2) the issue of convertible debt instruments and securitized debt; (3) the use of rating agencies to monitor firms and provide an objective valuation of their debts; and (4) the joint provision of debt and equity financing by banks that are also major shareholders. The last mechanism is discussed below.

¹⁵See Grossman and Hart (1982), Jensen (1986), and Stulz (1990). This reasoning assumes that bankruptcy is costly to managers because it tarnishes their reputation, which will reduce their value on the labor market. If managers can easily move into new jobs with no significant change in their total income, they will be less concerned about going bankrupt than if, for example, they want to protect their reputation as effective managers to attract outside employment opportunities or if their income is otherwise adversely affected by bankruptcy.

Equity contracts also affect the incentives faced by managers. The principal advantage of equity over debt is that it allows firms to share the risk they face with the shareholders rather than bearing it all themselves. The absence of a contractual obligation to make fixed payments reduces the penalty faced by firms in the event of an adverse shock. However, this flexibility in paying dividends is also the principal disadvantage of equity. Since managers know they have to share the rewards from successful projects with the shareholders, they may be less likely to increase their own effort in making projects successful, and more likely to divert resources and profits to their own uses or to engage in other self-promoting activities that do not maximize the value of the firm.

The principal weakness of equity finance is that there is no explicit mechanism for monitoring or controlling management as there is in a debt contract. Individual shareholders with small stakes have little incentive to impose discipline on managers because the costs of monitoring and controlling managerial behavior generally outweigh the increase in the value of their shareholdings that would result. This public good aspect to managerial discipline makes it unprofitable for individual shareholders to monitor managers. Even large shareholders can only express their concerns at infrequent shareholders' meetings unless they have direct representation on the board of directors or in management.¹⁶ Indirect mechanisms to mitigate the agency conflict between managers and shareholders have been created or have evolved spontaneously: (1) linking managerial pay to performance through ownership of stocks and stock options as well as through the payment of cash bonuses; (2) monitoring by large shareholders and the board of directors; (3) the threat of takeovers; (4) policies on the payout of dividends that limit the scope for managerial discretion through reputational forces; and (5) an increase in leverage.

This discussion assumes that minority shareholders have little or no ability to influence managerial behavior. However, there is an internal source of control: the directors of the company, who have a fiduciary responsibility to protect shareholders' interests. This requires that they monitor the activities of the managers and discipline managers who consistently fail to act in the shareholders' interests. Of course, there is the problem of ensuring that the directors act appropriately, since in many cases they are appointed by management. This can be achieved, for example, by legislating codes of con-

¹⁶Bondholders are in a worse position than shareholders, since they have access to the same information but no direct means of influencing managerial behavior.

duct and responsibility for directors, by having directors nominated by all claimants on the firm, and by having outside directors.

The capital market itself provides an external control mechanism: the threat of takeovers. If ownership is a marketable commodity, a firm that is perceived to be underperforming relative to potential can be purchased by an outsider that installs a new managerial team that can correct the problems and earn greater profits for the firm. If the firm's shares are traded on an open market, the daily share price provides an indication of the firm's prospects. A potential raider can then determine how the market value of the firm relates to the value he places on the firm. Again, takeovers are likely to influence managers' behavior only if they perceive a personal cost to being taken over.

In practice, however, takeovers are not always effective. They may be a weak disciplinary tool because it is relatively easy for managers to protect themselves against personal losses owing to takeovers, for example, by creating "golden parachutes" that give them extremely generous severance packages. Moreover, the information asymmetry between firm insiders and raiders can reduce the probability that the takeover will be profitable. Insiders will only be inclined to sell their shares if they think the market overvalues them. Small shareholders will have an incentive to free ride on the takeover bid since they can expect the value of their shares to rise either because of a successful bid and restructuring or because the raider has to pay a premium to acquire a majority share. Therefore, takeovers can result in the raider paying too much for the company.¹⁷ If this free rider problem is significant, takeovers will generally only be profitable if the raider values the firm differently than the current shareholders or if the raider can exploit minority shareholders through equity dilution after the takeover.

In the formerly centrally planned economies, the most important sources of corporate control are likely to be bank debt and monitoring by large shareholders. The dominant sources of uncertainty are systemic in nature, which makes it difficult to determine how much of a firm's performance reflects the quality of its management. Therefore, managerial contracts will have a large noncontingent element, which does not induce them to increase their effort. Moreover, contract enforcement is still weak in these economies, which reduces the strength of purely contractual arrangements. However, the control

¹⁷See Grossman and Hart (1980) for an elaboration of this idea. Shleifer and Vishny (1986) note that if the increase in the value of the raiders' shares exceeds the amount spent to induce minority shareholders to sell, the takeover will be profitable.

mechanism provided by bank loans—assuming banks' decisions are guided by purely economic motivations—is effective. So too is the potential role of holders of significant blocks of voting shares, since they have a greater influence on managerial activities than do small shareholders. The privatization programs in place or envisaged in the economies in transition will, in principle, allow for concentrations of shareholdings of this sort.

Universal Banks and Capital Markets

Universal Banks

Many authors have argued that the universal banking system, such as that of many continental European countries—Germany in particular—should be established in the formerly centrally planned economies.¹⁸ In fact, many of the countries in transition have already passed legislation providing for the creation of universal banks (see Table 3). In such a system, banks provide both commercial and investment banking services such as the underwriting of securities issues and participation in secondary markets, although the latter may be relegated to subsidiaries. Most important, universal banks are often permitted to hold significant amounts of equity in the firms to which they lend and to represent themselves, as well as shareholders whose shares they hold in trust, on the boards of directors of these firms.

The central argument for such an arrangement is that by internalizing the debt/equity conflict identified above, universal banking allows for an allocation of financial resources that is more efficient and that allows firms to concentrate on longer-term objectives. In a universal banking system, banks are in a position to monitor closely and to influence the decisions taken by the managers. They can therefore discipline poor managers in two ways: by pressing for their removal by the board of directors and by withholding credit. In addition, the combination of commercial banking and investment banking activities is thought to allow universal banks to capture economies of scale and scope, and therefore to provide both kinds of services at reduced costs.

Kindleberger (1984) has argued that the role of banks as "engines of growth" in Europe has been overplayed. Moreover, a structure

¹⁸See, for example, Saunders and Walter (1992) and Corbett and Mayer (1991). Gerschenkron (1962) and Cameron (1991) have argued strongly that the universal banking model played a key role in the development of continental Europe.

Table 3. Regulatory Environment for Banks in Selected Central European Countries

	Former Czechoslovakia	Hungary	Poland	Bulgaria	Romania
Universal banking?	Yes	Yes	Yes	Yes	Yes
Limits on equity participation by banks	Participation in nonbanks limited to 25 percent of capital and reserves without prior consent of central bank; may acquire a 10 percent share of capital of nonbank without prior consent of central bank	Long-term investments in nonfinancial institutions limited to 15 percent of warranty capital for commercial and specialized banks and 40 percent of warranty capital for investment banks. No bank can hold more than 51 percent share in nonfinancial firms Sum total of shares held by a bank in a nonfinancial institution may not exceed 60 percent of warranty capital Above calculations can exclude securities held by bank for less than six months	Participation in other institutions (including loans) limited to 25 percent of capital and reserves without prior consent of central bank	Ten percent of share capital of nonbank without prior consent of central bank; excludes shares and interests acquired in debt settlement provided they are sold within three years Sum total of investments of bank in immovable property, equipment, shares, and interest in nonfinancial undertakings limited to own capital	Twenty percent of share capital of nonbank without prior consent of central bank

Minimum capital requirements for opening a new bank	Foreign owners of universal banks: \$ 10 million or equivalent in koruny or convertible currency	\$12 million for commercial bank; \$6 million for specialized or investment bank	Foreign owners: \$6 million or equivalent in convertible currency Domestic owners: Zl 70 billion	Domestic operations only: leva 200 million Domestic and foreign operations: leva 500 million	Lei 20 billion (1992)
Limits on ownership of banks	Foreign financial institutions' participation in privatization of state-owned banks limited to 25 percent; can be waived on a case-by-case basis Nonbank share cannot exceed 10 percent of bank capital without prior consent of the central bank	Except for financial institutions, maximum stake for a single investor is 25 percent (limitation applies to government from 1997) Total foreign participation in banks in excess of 10 percent requires government approval Foreign financial institutions' participation in privatization of state-owned banks limited to 25 percent	Government will determine limits on size of foreign investors' equity stake in privatization of state-owned banks Ownership of any individual shareholder limited to 50 percent of bank's capital	None	None
Risk-weighted capital adequacy requirements	Banks established before 1991: (a) 6.25 percent by end-1993	Banks established before 1991: 8 percent according to Hungarian account-	Banks established before 1989: 8 percent with transition period and inter-	Eight percent transition period to be determined	Eight percent by end-1994

Table 3 (concluded).

	Former Czechoslovakia	Hungary	Poland	Bulgaria	Romania
	(b) 8 percent by end-1996 New banks: 8 per- cent	ing standards (including 4 percent core capital); cen- tral bank can grant exemption until 1994 New banks: 8 per- cent	mediate targets determined on a case-by-case basis by the central bank New banks: 8 per- cent		
Bankruptcy law	Bankruptcy law enacted 1991— implemented in April 1993 Banks can initiate bankruptcy pro- ceedings	New bankruptcy law came into effect 1/1/92 Debtor must declare bankruptcy if any payment obligations are overdue by more than 90 days Liquidation pro- cedure can be initi- ated by banks	Bankruptcy law dates to 1934, amended by the Insolvency Act of 1990 Banks can initiate bankruptcy pro- ceedings or liquida- tions under the Law on State Enterprises Law on Mutual Set- tlement of Debts (effective 1993) gives banks the lead role in negotiating creditor agreements with firms	No separate bank- ruptcy law; tempo- rary provisions part of 1989 decree on economic activity Banks can initiate bankruptcy pro- ceedings	Bankruptcy Law of 1887 still in effect; new legislation before parliament Law 76 of July 1992 allows banks to initi- ate bankruptcy pro- ceedings

Sources: Official government reports and documents.

that was appropriate in nineteenth century Europe, for example, is not necessarily appropriate for the economies in transition today; in fact, such a model might be particularly inappropriate for these countries. First, the universal banking model gives significant equity stakes to the commercial banks. In the Czech and Slovak Republics and in Poland such investments can reach 25 percent of the bank's capital, and in Hungary they may reach 15 percent, without requiring central bank approval. Hence, an important part of bank assets will be composed of shares in newly privatized firms. But these shares are extremely difficult to value, and market determinations of this value are likely to fluctuate widely. Also, the dominant source of uncertainty in the transitional economies will be systemic in nature. Therefore, diversification of banks' portfolios will not necessarily eliminate much of this variability. The monetary authorities may therefore want to enforce strict compliance with prudential regulations that set broad limits on bank ownership of nonfinancial enterprises and on equity positions of core capital (see Table 3).

Second, commercial bank participation in the management of a large number of enterprises threatens to dilute already scarce human capital in financial management. Securities market activities require expertise similar to that employed in commercial banking: evaluating potential risks and returns to investments and being able to price financial assets. If these skills are not well developed, both banking and securities operations will suffer. Since bank lending will likely contribute more to corporate growth than securities, it would be desirable to concentrate whatever financial expertise there is on the banks' core lending activities. Moreover, bankers do not necessarily make good managers or directors, and thrusting them into this role would divert their attention away from the activity in which they presumably have a comparative advantage.

There is also an important managerial issue. Banks have limited experience with risk and credit management skills. They therefore need to establish strict internal guidelines that ensure that loans are based on sound credit analysis. If they are allowed to hold significant equity stakes in firms to which they also lend, they may face the same perverse incentive to continue lending to insolvent, or at least unprofitable, enterprises as occurred under the previous regime. This incentive can be controlled by the maintenance of "fire walls" between the investment banking and credit operations of the bank, but such controls can be difficult to erect and monitor.

A similar consideration is that it is much more difficult to supervise and regulate universal banks than narrower commercial banks or investment banks. As a simple prescription, banks should not be

allowed to engage in activities that regulators cannot be certain they can monitor. If bank supervision and regulation is weak, as in the economies in transition, the full range of universal banking activities should not be permitted in the initial stages of the transformation process. It is easier to allow commercial banks to broaden their activities and become universal banks later (if that is the desired path of financial development) than to force universal banks that have run into difficulties to shed their securities market-related activities. If banks are eventually to be allowed to have a direct role in securities markets, these activities should be confined in separately capitalized subsidiaries to ensure that the failure of the securities business does not affect the capital that supports the commercial banking activities.

Finally, Steinherr and Huveneers (1990, 1992) and Muldur (1992) find no evidence of economies of scale or scope in universal banking and warn that such a system leads to excessive cartelization in the financial sector and underdevelopment of securities markets. They also raise the possibility that banks will become captive to the firms in which they hold significant equity stakes and may not fully exercise their corporate governance role. Thus, in the economies under transformation, universal banking may simply add to the riskiness of banks' portfolios without significantly improving their corporate governance role, their own profits, or the allocation of capital. These considerations argue in favor of at least delaying the establishment of universal banking institutions until the supervisory and regulatory authorities have developed the capability to enforce fire walls and prudential regulations, economic uncertainty relating to the transformation process has diminished significantly, and bank managers have established successful track records.

Capital Markets

Capital markets in formerly planned economies potentially have a number of important roles to play in the transformation process, including facilitating the process of privatization; providing risk capital or long-term debt finance for restructuring and expansion; providing a mechanism for noninflationary finance for the government; providing mechanisms for corporate control; and providing domestic and foreign savers (including institutional investors) with instruments to diversify their portfolios, thereby encouraging savings and the mobilization of funds.

Unfortunately, existing capital markets in these economies are ill equipped to perform such tasks soon. Trading of stocks is generally insufficient to support significant new issues, and much of the trad-

ing that does occur is unregulated and unsupervised. In addition, in the current inflationary environment in many of these countries, corporations are reluctant to issue bonds. So the provision of new capital through the equity and bond markets is unlikely to be significant under current conditions. However, secondary markets for equity will provide a valuable means of transferring ownership rights—thereby giving real meaning to privatization.

Equity Markets

In addition to the risk-sharing benefits of equity, the transformation to a market economy creates a special motivation for the development of equity markets: privatization. Although the current state of equity markets does not make privatization through initial public offering a viable option for most enterprises, alternative strategies such as voucher privatization will result in large numbers of individuals and institutions holding claims to former state-owned enterprises or to investment funds. Since the initial distribution of privatization vouchers or shares is unlikely to coincide with individuals' preferred holdings, a secondary market for these instruments would allow a more efficient distribution of equity ownership. In addition, a secondary market for such claims will provide individuals with some liquidity in their investments.

The development of a viable equity market, however, is difficult and time consuming and includes an important role for the authorities. Although it is preferable that the actual structure of the market—for example, exchange trading versus over-the-counter trading, brokers versus dealers, call market versus continuous trading—is determined by its participants, the authorities must ensure that activity is appropriately regulated and supervised and that the essential preconditions to efficient market operation are provided.

First, as indicated above, priority should be given to the development of a competitive banking system. Liquid interbank markets—supported by an efficient large-value payment system—are a key institution for the development of securities markets.¹⁹ Efficient clearing and settlement of securities transactions depend on the existence of a banking system capable of providing liquidity to securities firms and clearinghouses. The delay in providing appropriate clearing and settlement systems owing to problems with the large-value transfer system for domestic payments and/or the inability to process the

¹⁹See Blommestein (1993a and b), Summers (1994), and Folkerts-Landau, Garber, and Lane (1994).

potentially large volume of securities transactions of low value has been an important constraint on market development in the formerly centrally planned economies.

It is also important to address the minimum regulatory requirements. At the very least, the existence of a secondary market for equity requires the legalization of free disposal of private property; limited liability for shareholders; commercial law specifying the rights and responsibilities of firms, managers, shareholders, and directors; and securities legislation prohibiting market manipulation and fraud and specifying penalties for infractions. Such legislation requires a body that is empowered to enforce the law, capable of carrying out sanctions, and removed from political influence. The authorities need to avoid unnecessary legal or fiscal restrictions on the transfer of shares. More generally, the regulatory framework must be efficient, taking into account the type of investors (small or large) and the business involved.

Investor confidence is important to the continuation of any asset market, and particularly in the formerly centrally planned economies, in which, for the most part, experience with trading financial assets is limited. Participants must be confident that the market is fair and that there is an effective authority actively seeking to maintain this fairness. It is vitally important, therefore, to provide avenues for the dissemination of information about the market and listed companies. This requires the use of widely agreed accounting and auditing standards and regular financial statements from listed companies.

The so-called emerging markets provide an indication of how well equity markets in the transitional economies might function. A number of common characteristics can be identified: (1) these markets are thin, even where they are relatively old; relatively few firms, corresponding to a small fraction of total capital in the economy, are listed; (2) these markets are highly illiquid, with trading concentrated in only a small subset of the firms listed; (3) they are volatile, with the average weekly rate of change in the index exceeding that of the more developed markets; (4) they are prone to speculative bubbles and collapses; and (5) they are vulnerable to fraudulent activity.

Another source of concern is the inefficiency of asset pricing in these markets. Even if there were liquid markets in equity, the problems of determining asset values without standard financial statements and with almost meaningless historical price and output figures make objective pricing extremely difficult. Therefore, for the foreseeable future, prices will be highly unreliable. Nor will it be any easier to price the investment trusts. Moreover, simply because investment trusts may hold large portfolios, they may not be much

less risky than individual firms. The most important source of risk in the economy is likely to be political risk, which cannot be diversified.

This brief examination of the immediate prospects for well-functioning equity markets in the formerly centrally planned economies is less than encouraging. The institutional preconditions for the effective operation of primary and secondary markets for equity—a sound banking system capable of providing liquidity, an efficient payment system capable of effecting timely payment versus delivery, and the requisite regulatory and legislative foundation—will necessarily take time to erect. In addition, private pension and insurance funds, which are key participants in equity markets in industrialized countries, are so far missing in the economies in transition. These contractual savings institutions, when fully funded and permitted to invest in equity and bonds, will play an important role in promoting these markets. However, such developments will take time. In the meantime, equity prices will likely prove to be unreliable and markets will be illiquid. In such circumstances it is unlikely that equity markets will provide substantial new capital.

Bond Markets

In more developed capital markets firms raise capital by issuing debt securities of their own (for example, commercial paper, corporate bonds). These instruments are attractive because they provide cheaper and more flexible sources of finance than, say, bank loans, as they reduce the role of the intermediary between the firm and the ultimate investors. Investors hold corporate debt because it provides an attractive return and because it is a tradable asset and so is not significantly less liquid than deposits.

However, access to the bond market is usually restricted to only the most profitable and reputable firms, because holders of debt securities generally are less able to monitor managers' behavior than are banks and perhaps even equity investors. They therefore will usually be prepared to invest in debt securities only if an effective control mechanism has already been established. This control problem is solved at least partly by requiring that bonds must be rated on an ongoing basis by an independent agency with access to the same confidential financial information provided to banks. Bondholders thereby leave it to the rating agency to monitor the quality and activities of the firm's management, the return on the firm's investments, and other considerations that determine its ability to service its debt. In addition, commercial banks provide a signal to investors about the firm's ability to service its debt through their willingness to lend to

the firm, particularly if bank loans are junior to debt securities. Finally, bondholders can exert a certain amount of direct control through the use of bond covenants restricting, for example, the firm's ability to take on more debt, particularly if that debt would be senior to the existing debt, or to increase its dividend payments.

The development of the corporate bond markets requires the same institutional and regulatory preconditions as those of the equity markets. In addition, the existence of liquid markets in bonds with shorter maturities is a general precondition for bond issues of longer maturity. Clearly, therefore, the government's financing activities will assist in the development of this market. By providing a relatively safe, homogeneous asset with a range of maturities, the government can build up investors' experience in trading financial assets, thereby providing a pool of potential investors, and facilitate pricing of longer-maturity instruments. The development of the bond markets is also supported by interest rate deregulation.

Capital Market Development in Central Europe

The development of capital markets in the formerly centrally planned economies is still at a relatively early stage (see Tables 4 and 5). There are stock markets in Bulgaria, Hungary, Poland, Ukraine, the former Yugoslavia, and the Czech, Russian, and Slovak Republics. However, with the possible exception of the Warsaw Stock Exchange, where weekly turnover has recently reached record levels of over \$100 million, these exchanges see very little activity. The Budapest Stock Exchange is open five days a week, but weekly stock turnover is usually only in the range of \$1-4 million. The Prague Stock Exchange generally has turnover of less than \$100,000 with one day of trading per week, while turnover on the Bratislava Stock Exchange in listed and unlisted stocks is usually less than a tenth of that amount. In general, there are few issues listed and even fewer see active trading. For example, the Prague Stock Exchange has 957 unlisted stocks eligible for trading but fewer than 10 percent of these have seen any activity. Reporting requirements are often weak—for example, the unlisted stocks on the Prague Stock Exchange and the Bratislava Stock Exchange are not required to provide any information—and supervision of these markets is still incomplete.

Most of the securities trading takes place outside the organized exchanges and is therefore almost entirely unregulated. Over-the-counter trading in equity in the Slovak Republic was recently estimated to exceed trading on the Bratislava Stock Exchange by a factor of ten. The second round of trading on the RM System, an electronic

over-the-counter stock trading system that competes against the Prague Stock Exchange and Bratislava Stock Exchange, had turnover of Sk 252.4 million in the Czech Republic in July, compared with weekly turnover on the Prague Stock Exchange of less than Sk 1 million. Furthermore, there are no reporting requirements for the unlisted stocks on the Prague and Bratislava Stock Exchanges.

Generally speaking, with the possible exception of the Warsaw Stock Exchange, turnover is simply too low—even including over-the-counter trading—and the number of issues being actively traded is too small to provide hope that firms will raise substantial amounts of new capital soon. In addition, the markets are extremely volatile, often driven by frenzied buying of only a small number of stocks and frequently tainted by the suspicion of illegal trading activities.

There are comparatively active bond markets in most of the formerly centrally planned economies. Indeed, turnover on the Prague, Bratislava, and Budapest Stock Exchanges is dominated by trading in bonds. Until recently, 90 percent of the turnover on the Bratislava Stock Exchange was in bonds, although that proportion has now fallen to about 70 percent. On the Prague and Bratislava Stock Exchanges the proportion of on-exchange trading accounted for by bonds exceeds 80 percent. However, except for one corporate bond traded on the Prague Stock Exchange, these are government bonds.

Investment Funds

The previous sections suggest that the financial systems in the formerly centrally planned economies may not yet be capable of providing the two services identified as essential for the transformation to a market economy: directing resources to their most efficient uses—for example, for restructuring—and providing effective corporate governance. Several countries have therefore created new types of financial institutions—hybrid investment funds—adapted to fit the special economic circumstances such countries face: a shortage of domestic savings, rudimentary capital markets, and difficulties in evaluating risks (Table 6). The innovative feature of these hybrid funds is that they are intended to play a threefold role (Blommestein, 1992): (1) serving as a mechanism for the transfer of ownership to large segments of the population while permitting portfolio diversification to small investors; (2) playing an important corporate control role in privatized enterprises; and (3) raising new financial funds for the restructuring of privatized enterprises. Over time these funds are also intended to contribute to the development of capital markets.

Table 4. Regulatory and Legislative Framework for Securities Markets in Selected Central European Countries

	Czech Republic and Slovak Republic	Hungary	Poland
General securities law	Stock Exchange Act (1992) Act on Securities and Bonds (1992) Government Securities Act of Czech Republic (1993)	Act on Public Offering of Securities and the Stock Exchange (1990)	Act on Public Trading in Securities and Trust Funds (March 1991)
Supervisory structure	Ministry of Finance, through the Stock Exchange Commissioner	State Securities Supervision Board	Securities Commission
Location of exchanges	Prague and Bratislava Stock Exchanges opened April 6, 1993 with trading in bonds only. Trading in shares began June 22 in Prague, July 1 in Bratislava. Bratislava Options Exchange opened April 2, 1993 trading futures and options on stocks	Budapest Stock Exchange (June 19, 1990) Budapest Commodity Exchange (March 16, 1993)	Warsaw Stock Exchange (April 16, 1991)
Organization	Screen-based, order-driven; listed, unlisted stocks traded on the exchanges, which compete with RM-System, an off-exchange electronic trading system Limit prices were in effect on Prague Stock Exchange until September 1993 (20 percent fluctuation–50 percent for previously untraded stocks) Prague Stock Exchange trades on	Order-driven, partially screen-based (Central Market Support System) Monday to Friday, 11:00–12:30	Screen-based, order-driven, limit prices in effect (10 percent fluctuation allowed) Monday, Tuesday, Thursday, 10:30–1:00

Tuesdays—plan to add Thursday sessions in October 1993;

Bratislava Stock Exchange trades listed stocks on Tuesdays; and unlisted stocks on Wednesdays

Clearing and settlement

Centre for Securities (SCP) in each successor republic; book-entry

Book-entry through the Central Clearing House and Depository for Budapest Stock Exchange trades, physical transfer for over-the-counter market
T+5

National Depository of Securities, screen-based, order-driven trading
T+4

Sources: Official government reports and documents; *Bloomberg; Business Eastern Europe; Butterworths Journal of International Banking and Financial Law; Central European; Euroweek; Euromoney; International Finance Review; International Financial Law Review; International Securities Regulation Report*; and *PlanEcon Business Report*.

Table 5. Types of Securities Issued and Trading Activity in Selected Central European Countries

	Czech Republic	Slovak Republic	Hungary	Poland
Government paper	Treasury bills: 1-, 2-, 3-, 4-month Treasury bonds: 2-, 3-year State bonds Rehabilitation Bonds: 5-, 10-year	Treasury bills: 5-day, 1-month State bonds	Treasury bills: 30-, 90-, 180-, 360-day Treasury notes: 1-year State bonds: 2-, 3-, 4-, 5-year	Treasury bills: 4, 8, 13, 26, 39, 52 weeks Treasury bonds: 1-, 3-year Bonds convertible into shares in privatized enterprises
Corporate paper	Commercial paper Bonds: up to 5-year	Bonds	Commercial paper Bonds: 1-, 2-year	...
Stock exchange	Initial capital = Kč 120 million (\$4.3 million) 1st day turnover: Kč 4.4 million Aug. 20 turnover: Kč 1.7 million in stocks, Kč 7.5 million in corporate and government bonds Stocks: 957 unlisted, two listed; 3 bonds listed, one unlisted; 53 stock exchange members Foreign trading restricted to one-third of total	7 listed stocks 8 unlisted stocks government bonds Aug. 13 turnover: Sk 82,505—listed stocks, Sk 77,040—unlisted stocks, Sk 623,067—bonds Stock futures and options traded on Bratislava Options Exchange 53 stock exchange members	End-1992 capital.: Ft 47 billion in equity, Ft 155 billion in bonds 1992 turnover: Ft 33.7 billion (82 percent in bonds) Aug. 25–29 turnover: Ft 252.4 million in stocks, Ft 65.2 million in bonds 26 stocks, 11 bonds, 9 treasury bills, 1 compensation coupon, 4 investment funds, stock options deutsche mark-, U.S. dollar-government bond futures at Budapest Stock Exchange; deutsche mark and U.S. dollar futures at Budapest Commodity Exchange	End-1991 capital: Zl 1,500 billion End-1992 capital: Zl 3,500 billion Aug. 26, 1993 capital: Zl 33,209 billion End-1991 turnover: Zl 150 billion/month End-1992 turnover: Zl 352 billion/month Week ended Aug. 20 turnover: Zl 2,115 billion in stocks, Zl 30 billion in bonds 19 stocks (plus 1 on parallel market), 6 bonds traded 29 stock exchange members

Taxation	1 percent bond administration fee 25 percent withholding tax	...	44 stock exchange members, some one-third are foreign Certain purchases of Hungarian shares are tax deductible	Dividends taxed at 20 percent; capital gains generally tax exempt
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Sources: Official government reports and documents; *Bloomberg*; *Business Eastern Europe*; *Butterworths Journal of International Banking and Financial Law*; *Central European*; *Euroweek*; *Euromoney*; *International Finance Review*; *International Financial Law Review*; *International Securities Regulation Report*; and *PlanEcon Business Report*.

The role of the investment funds is essentially to concentrate capital ownership and thereby act as large shareholders that have an incentive to provide corporate control since individuals would invest in these investment funds rather than directly in private firms. In the context of voucher-based privatization, individuals can sell their vouchers to the funds or exchange them for shares in the funds themselves. As large shareholders, the funds could also play an active role in enterprise management; the needed expertise could be provided in part by allowing foreign "experts" to manage these funds. (To offset the possibility that oligopolistic behavior by the investment funds would simply replace similar behavior by former state-owned enterprises, entry into the investment fund industry should be relatively free of restrictions.)

The combination of what are essentially investment banking and portfolio diversification services makes these funds unique and complicates their design. For example, it is probably inappropriate to model these funds on open-end mutual funds as are found in industrial countries, although both closed-end and open-end funds have been created in some of the economies in transition. Open-end funds must continually ensure sufficient liquidity to be able to satisfy demand for redemption of outstanding shares. Since the funds' investments—shares in former state-owned enterprises and investments in restructuring projects—will probably be highly illiquid, an open-end structure would either limit the funds' ability to invest in restructuring or require them to maintain possibly expensive lines of credit with commercial banks. More important, open-end mutual funds typically do not exercise a control function, serving instead simply as a means for individual investors to hold a diversified portfolio.

It would seem preferable, therefore, to limit the ability of investors to redeem their shares either by setting up the investment funds as closed-end funds or by restricting redemptions during an initial period. However, it would be permissible for individuals to trade in investment fund shares among themselves on a secondary market. In this way, the initial capital base of the investment funds would at least be partly protected—although it would of course fluctuate with the value of the funds' investments—while promoting the development of an equity market. The latter effect would be only marginal at first. The considerable uncertainty during the transformation period, the lack of reliable financial information on many enterprises, and the lack of a market for most enterprises' shares make it very difficult to value investment fund shares reliably. They are therefore likely to

suffer from thin trading and high price volatility. In the same vein, the portfolio diversification benefits of investment funds should not be overestimated. The overwhelming sources of uncertainty during the transformation are systemic in nature and therefore not diversifiable. This tendency for the value of all enterprises owned by the investment funds to move together is exacerbated if the investment fund managers have decided to channel the bulk of their investments to a few sectors.

The investment banking operations of the investment funds could be arranged in one or both of two broad patterns: the investment funds could simply assist enterprises in their search for external investors and creditors, in which case the loans, for example, would be made direct from commercial banks to the enterprises; or the investment funds could themselves borrow from commercial banks—perhaps using their capital base to borrow on terms more favorable than those available to individual enterprises—and use these funds to finance the enterprises they control.

The features of investment funds that have been established or are on the drawing board raise a number of important questions regarding regulation. When funds are essentially providing a portfolio diversification service to small investors, regulations are designed to protect the investors by limiting risk-taking by fund managers. Regulation of investment banks, on the other hand, necessarily places less emphasis on limiting risk than on protecting the capital base of these institutions, while venture capital firms face much less regulation. Therefore, the regulation of investment funds must somehow forge a compromise between the interests of the funds' investors and the objective of facilitating the reconstruction. However, no compromise should be made in eliminating fraud or the improper use of funds by investment fund managers. Such activity, and illicit financial transactions generally, would undermine confidence in financial markets (Blommestein, 1992, 1993b). Regulation should therefore take into account the unique objectives and features of the investment fund, but at the same time should be stringent in fighting against fraud and serious conflicts of interests.

Markets for Derivative Securities

The possibility of introducing markets for financial derivatives in the formerly centrally planned economies has already been considered (Antowska-Bartosiewicz and Malecki, 1992). Indeed, such securities are already available in some of these economies and are being

Table 6. Investment Funds in Selected Central European Countries

	Czech Republic and Slovak Republic	Hungary	Poland
Legislation	Act on Investment Companies and Investment Funds (April 1992)	Law enacted Nov. 1991, effective January 1992	Act on Public Trading in Securities and Trust Funds (March 1991)
Types of investment funds	Open- or closed-end funds	Open- or closed-end funds	Open-end
Portfolio value of assets	After first round of privatization, investment funds held approximately 70–75 percent of the market value of privatized enterprises, estimated at Kčs 522 billion	State Property Agency had Ft 814.6 billion in assets at end-May, 1993 and had sold Ft 105.2 billion in assets since March 1990	...
Investment restrictions	<p>—No more than 10 percent of fund assets may be invested in one issuer's securities, except for state bonds</p> <p>—No more than 5 percent of fund assets may be invested in one piece of real estate or movable asset</p> <p>—Fund may not invest in more than 20 percent of the securities issued by one issuer</p>	...	Up to 10 percent of a bank's assets can be invested abroad or in other than publicly traded securities. No more than 5 percent of its assets can be invested in the securities of a single issuer

Types of funds	Private: Czech and Slovak American Enterprise Fund Czechoslovakia Investment Corporation, Inc. Some 400 or more investment funds emerged during the voucher privatization process	Private: Austria-Hungary Fund Budapest First Fixed-Income Fund COFINEC SA First Hungary Fund Hungary-American Enterprise Fund Hungarian Investment Co. Hungary Investment Partners Hungary Government Debt Fund 6 privatization-related investment funds	Private: Pioneer First Polish Trust Fund Polish Private Equity Fund Poland-American Enterprise Fund
Supervision of investment funds	State administrative authorities as defined by the Czech National Council and the Slovak National Council	State Securities Supervision Board	...

Sources: Official government reports and documents; *Bloomberg; Business Eastern Europe; Butterworths Journal of International Banking and Financial Law; Central European; Euroweek; Euromoney; International Finance Review; International Financial Law Review; International Securities Regulation Report; PlanEcon Business Report*; and *Risk*.

planned for others.²⁰ The argument in favor of their introduction is that the transformation from a centrally planned system to a market system implies such large shocks to commodity and asset prices and to interest rates and exchange rates that investors and firms alike need to be able to hedge their exposures to these shocks.

In most instances, markets for trading derivatives are not presently viable in the economies in transition, because of the mechanisms such markets require. The principal use for derivatives contracts by firms is in allowing them to hedge against adverse financial price developments. However, in general the maintenance of a hedge requires the ability to trade both the derivative security and the underlying instrument at short notice and without causing adverse price movements. Therefore, such derivatives can only be effective if there is a highly liquid market for the underlying instrument. For example, there should be liquid spot foreign exchange and money markets.²¹ Moreover, these markets rely heavily on settlement and payment systems and bank liquidity to satisfy margin requirements on futures exchanges.

More fundamentally, liquid markets for the government bonds or currencies underlying the contracts are needed to price the derivative securities in the first place. Without a liquid underlying market, investments in these securities would essentially be speculative. Similarly, forward currency contracts are priced from the yield curve on government securities, which requires a liquid money market with a range of maturities.

The danger posed by a premature introduction of these markets is not that they will not be used, but that their use will increase the risk to other parts of the financial system, particularly the banking sector, which is directly linked to the real sector of the economy. If banks are not adept at credit risk evaluation, their involvement in derivatives markets could have serious systemic repercussions.

²⁰In Hungary the Budapest Commodities Exchange and the Budapest Stock Exchange have both introduced futures contracts for U.S. dollars and Hungarian Government bonds. Stock futures and/or options are also traded on the Budapest Stock Exchange and the Bratislava Options Exchange. There are also dozens of commodity exchanges in Central and Eastern Europe, many of which offer standardized derivatives contracts. Finally, financial derivatives are frequently contracted on a bilateral basis between enterprises, although such activity is entirely unregulated.

²¹Interbank foreign exchange markets are relatively new in the formerly centrally planned economies, but reasonably liquid markets are emerging in Hungary and Poland and in Moscow. In Hungary, for example, a reference rate for the exchange rate is fixed each morning by the central bank and commercial banks are permitted to exchange currencies at rates 0.5 percent above or below this rate. Daily turnover in May 1993 was approximately \$120 million a day.

Role of Financial Institutions in the Transformation in Poland, Hungary, and the Czech and Slovak Republics

Restructuring of Banking Sector

The introduction of central bank legislation and new banking laws marked the beginning of a market-based financial system in Hungary, Poland, and the Czech and Slovak Republics (see Tables 1, 2, and 3 for a summary of the structure of the banking system in these countries). Three objectives can be distinguished: (1) to establish a two-tier banking system by separating central banking operations and commercial banking functions; (2) to provide the central bank with the means to conduct monetary policy and to supervise the banks (Blommestein, 1993a); and (3) to grant greater autonomy to the banks in making lending decisions on the basis of commercial criteria.

Much of the necessary legal and accounting framework for restructuring of the banking sector has been put in place in these four countries. The existing legal framework gives the central banks the basis for issuing regulations covering reserve requirements, liquidity, foreign exchange exposure, lending limits to individual clients, and capital adequacy (see Table 3). However, banks in Hungary, Poland, and the Czech and Slovak Republics continue to face serious structural problems, which are hindering their ability to contribute as competitive market-based institutions to the success of the transformation process, including privatization and the development of the private sector more generally. Credit allocation remains concentrated in a relatively few state-owned banks, which are saddled with large and growing amounts of nonperforming assets—primarily of inefficient and loss-making state-owned enterprises. Bank lending remains biased toward these same firms owing to “captive-lending” relations (Blommestein, 1993a). Consequently, the asset portfolios of the larger state-owned banks (and some of the smaller private banks) are highly illiquid.

In response to these problems, governments have started to take measures for the restructuring of the larger state-owned banks. Banks have been encouraged to increase capital and set aside loan loss reserves from profits (see Table 2). It is a positive sign that the privatization of banks has begun. Nonetheless, most of the state-owned banks remain severely undercapitalized and cannot hope to meet international capital adequacy ratios in the near term using their own resources. In addition, the amount of nonperforming loans is substantial. Table 2 provides official estimates of nonperforming assets for Poland, Hungary, and the Czech and Slovak Republics. Unofficial

estimates are higher. In addition to their financial weakness, banks lack adequate personnel with modern banking skills. Rather than supporting the transformation process, the weak banking system is currently a serious obstacle because of its continued misallocation of capital to the state sector, while crowding out creditworthy new entrepreneurs and recently privatized enterprises. The growth of interenterprise arrears in the region is additional evidence of the adverse incentive structure underlying the disfunctioning of the banking sector. Finally, the underdeveloped and fragile state of the banking system is also hindering the development and functioning of a capital market, including investment funds.

Development of Capital Markets and Investment Funds

The first stock exchange to reopen its doors in Central and Eastern Europe since World War II was the Budapest Stock Exchange, in June 1990. Transactions in treasury bills, corporate bonds, and company shares on the Budapest Stock Exchange are regulated on the basis of the Law on the Public Issue and Trading of Securities, adopted in January 1990. This law established a State Securities Supervision Board to regulate the public issuance of securities and the rights and obligations of security traders to ensure an adequate level of investor protection. The Budapest Stock Exchange started with a two-tier structure: the first tier for listed securities, and the second for unlisted but registered securities. The public offering of Ibusz shares in 1990 was the first major privatization of a Hungarian company through a public offering on the Budapest Stock Exchange (see Apathy (1993) for a detailed account). Although this transaction was an important boost to the development of the Hungarian capital market in its initial stages, the market remained quite narrow and illiquid. This is illustrated by the fact that with about 20 quoted shares, 64 percent of trading in 1991 was in the shares of just three companies. Very few of the companies listed or registered on the Budapest Stock Exchange were the result of a privatization-related flotation. The other companies were new private companies that raised new risk capital to finance expansion. The two major reasons that more companies did not do the same are external funds can be more cheaply and easily raised through debt instruments and the thriving over-the-counter market, and it is not very attractive to raise capital in an illiquid market with volatile price movements. In 1991, the first full year of trading, the Budapest Stock Exchange index went from 1,000 in January, to a peak of 1,200 in March, to about 800, where it remained for much of 1992. In response, the stock exchange authorities launched a

third tier to the market in June 1992, in a move to draw over-the-counter trading onto the market floor. The third tier is meant for the trading of securities that do not meet the full listing requirements but have a newly formulated, simplified set of rules.

The Warsaw Stock Exchange was reopened in July 1992. The legal basis for the Warsaw Stock Exchange is the Law on Public Trading of Securities and Trust Funds, which was passed in April 1991. But some trading in securities—mostly stocks—was already taking place in early 1989, at several quasi-exchanges and as over-the-counter transactions (Szomburg, 1993). The securities law defines the roles of the Securities Commission, the Stock Exchange, the securities firms, and trust funds. It allows banks to undertake brokerage activities provided that their securities trading operations are financially and organizationally separate. By the end of 1992, 23 stock brokerage firms and more than 100 stockbrokers had been licensed. Many of the companies quoted on the Warsaw Stock Exchange are enterprises privatized through an initial public offering. The capital market in Poland is narrow, characterized by high volatility and illiquidity. Since the Polish mass program has not yet been launched, the volume and value of stock trading on the Warsaw Stock Exchange will continue to develop gradually in the near future. In contrast, the government securities market developed fairly rapidly, is relatively liquid, and is underpinned by modern secondary market arrangements. The sophisticated clearing and settlement system for government securities is also used for other securities. To improve liquidity, each listed company nominates a specialist who helps to match buy and sell orders but is not obliged to make a two-way market in the shares.

Capital market legislation for the Czech and Slovak Republics is in place, and stock exchanges began operating in Prague and Bratislava in April 1993. On both stock exchanges, trading is allowed in listed and unlisted securities. In addition, unlisted securities are traded on off-exchange markets, including the computerized RM System developed for the voucher privatization scheme. The major financial institutions—including investment funds—also arrange block trades of unlisted securities among themselves rather than on the exchanges.

It was explained above that special investment funds are intended to play an important role in the mass privatization process of some countries and that both investment funds of the OECD type and so-called hybrid funds are also expected to contribute to the development of capital markets (Table 6). In Poland and the Czech and Slovak Republics, investment funds are to play a threefold role: (1) to allocate vouchers (in the Czech and Slovak Republics) or participation certifi-

cates (in Poland) and to permit portfolio diversification to small investors; (2) to support and strengthen management; and (3) to mobilize capital for restructuring purposes. In contrast, in Hungary, investment funds are primarily designed as conventional investment funds to collect savings from small investors, and no direct role is envisaged for them in the process of privatization. The Polish authorities expect that investment funds will play an important role in both the restructuring and privatization of large enterprises as part of the Polish mass privatization program (see Blommestein (1992); and Szomburg (1993) for details). Indeed, hybrid investment funds are seen as an institutional innovation to speed up restructuring as well as to contribute to more efficient corporate governance in the form of better control and supervision of management performance.

Investment funds in the Czech and Slovak Republics are important in the allocation of vouchers. The 9 largest funds—there are more than 400 altogether—control almost half of all voucher investment points. Thus, the ownership transfer phase of the voucher privatization scheme has been completed. The next phase concerns the transfer of the tradable ownership titles to individual investors and investment funds, that is, the underlying shares in the enterprises. It remains to be seen how the investment funds will behave in their corporate governance role. Some of them (in particular those that are seriously undercapitalized) will probably be under considerable pressure to raise cash by selling on the capital market; this type of investment fund might also behave more like OECD-type portfolio managers. Other investment funds might be more active managing the firms in which they own shares, in particular when they are putting up or raising the capital for the restructuring of the privatized enterprises. Foreigners could not participate directly in the voucher privatization scheme, but they are allowed to buy shares in the secondary market.

Conclusions

The two most important contributions of financial institutions in the transformation from central planning to a market-based system are to maintain a corporate governance mechanism and to provide and allocate capital. This paper has investigated the possible roles of banks, equity and bond markets, and investment funds in performing these tasks. This brief examination suggests that, as weak as they are now in many of the formerly centrally planned economies, the

banks are still likely to be the most important sources of both corporate control and finance.

Therefore, the priority of the authorities in these countries should be the creation of a well-capitalized, competitive banking system—preferably one not complicated by a universal banking structure during the transformation itself—and the simultaneous creation of competent supervisory and regulatory agencies capable of enforcing their prescriptions. In particular, the creation of markets for equity and debt, and certainly markets for derivative securities, should not be an immediate priority of the authorities in these countries.

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