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**The Role of Financial Institutions in the
Transition to a Market Economy 1/**

Prepared by Hans J. Blommestein and Michael G. Spencer 2/

Authorized for distribution by David Folkerts-Landau

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Abstract

Financial institutions intermediate between savers and investors and contribute to corporate governance. Equity and bond markets in the former centrally planned economies are not yet in a position adequately to provide these services. It is not yet clear that investment funds will provide the necessary financing and corporate management. Therefore the first priority for financial sector reforms must be to establish a healthy commercial banking sector. Banks are the most promising source of financing, provide payment services which are crucial to both the real and financial sectors and, by monitoring the use of loaned funds, will be the primary source of corporate governance during the transformation to a market economy.

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2/ Respectively, Senior Economist, Directorate for Financial, Fiscal and Enterprise Affairs and Center for Cooperation with European Economies in Transition, OECD, and Economist, Research Department, IMF. We thank, without implicating, Gerry Caprio, Jacob Dreyer, Timothy Lane, Jürgen Odenius and Mark Stone for helpful comments on earlier drafts.

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Summary

The economic transformation under way in the former centrally planned economies (FCPEs) was motivated in part by the recognition that central planning has failed to allocate financial and real resources efficiently. This paper addresses the question of what kind of financial system should replace central planning in allocating capital and maintaining effective corporate governance during the transformation period.

Financial sector reform has, at times, been portrayed as a question of adopting either a bank-based or a (securities) market-based model. In the bank-based model, commercial banks, often licensed as "universal" banks, take the lead in financing enterprise restructuring and investment. Proponents of the market-based model argue that the structural problems in the banking sector cannot be overcome easily; so firms will have to look to equity and bond markets for sources of new capital.

Equity and bond markets in the FCPEs are not sufficiently well developed to support significant issues of new securities or to provide a mechanisms for corporate control. They lack adequate liquidity, regulatory oversight, information disclosure, and clearing and payment systems. The important role of banks in maintaining the payment system and in providing credit to market participants to support trading and settlement means that until banks are restructured and recapitalized, securities market development will be constrained.

Investment funds emerging from mass privatization schemes may create concentrations of equity ownership that would allow them to play an important role in corporate control and perhaps, too, in finding sources of investment capital. They are a relatively recent innovation, however, and it remains to be seen how active they will be in financing and managing privatized enterprises.

The authorities should first establish a healthy banking sector, because it is the banks that are the most promising source of working capital and corporate control. This does not mean that securities market development should be ignored, only that it should not be a priority use of scarce government resources at the present time.

Many observers recommend that banks be given the power to act as universal banks, combining lending with securities market operations and equity investment. The potential problems associated with such a model in the FCPEs during the transformation period outweigh any potential benefits. It is recommended, therefore, that commercial banking and investment banking activities be separated, at least until banks have demonstrated competence in their commercial lending operations.

I. Introduction

Policymakers in the former centrally planned economies (FCPEs) face the formidable task of creating functioning market economies in environments in which market mechanisms have been suppressed for decades. In this task they face a conflicting set of objectives: while 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 it.

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 the FCPEs. However, for privatization to succeed at all in improving efficiency in these enterprises the system of central control over enterprise management must be replaced by another mechanism which 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 FCPEs are plagued by low capital, large stocks of nonperforming loans to state enterprises, loan portfolios that are concentrated 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 non-existent or extremely small and illiquid and both the small- and large-value payments 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 inter-enterprise 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 to identify the priorities for financial sector reform. One approach to financial reform which has been proposed argues that the structural problems in the banking sector are so serious that they cannot soon be resolved and that therefore the authorities should 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 they 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. 1/ 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 the liquidity that maintains confidence in the payment system that 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. Finally, in the absence of prompt and credible judicial enforcement of financial contracts and in a climate of considerable systemic uncertainty banks are expected to provide the most reliable source of effective market-based corporate governance needed to ensure that financial resources are allocated and utilized efficiently.

From the primacy of ensuring the health of the banking sector, however, it does not follow that the development of securities markets, for example, is of little significance. The development of government securities markets is an important consideration in FCPEs with high budget deficits and also from the point of view of promoting money markets. In addition, the need to transfer ownership of hundreds of state-owned enterprises to the private sector and to restructure these enterprises will place great demands on capital markets. The initial allocation of assets arising from privatization may not coincide with the desired distribution--particularly

1/ Bank 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 non-bank financial intermediaries.

from a corporate control point of view. Secondary markets for equity provide the means by which individuals' holdings of shares can 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 an environment of great uncertainty that characterizes the transformation process, equity markets cannot be expected to provide significant sources of new capital. More importantly, securities markets rely heavily on banks as participants and as providers of liquidity in order 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 problems, 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. Important priorities too 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 this will be a time-consuming task. While 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 FCPEs 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 to a large extent the needs of the private sector which differ across countries and change over time, which implies that there is no unique blueprint that can be transplanted to the FCPEs. 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 supervise compliance with and to enforce these rules.

This paper is organized as follows. Section II discusses the role of the banking sector in allocating financial resources and in supporting securities markets. Section III outlines the corporate control function of the financial system which is largely missing in the FCPEs 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 discussed. Section IV evaluates the potential contributions of universal

banks, capital markets and hybrid investment funds. Section V discusses recent developments in four FCPEs--Poland, Hungary and the Czech and Slovak Republics--and relates these to the previous discussion. Section VI briefly sums up.

II. The Role of the Banking Sector

One of the core challenges facing the FCPEs 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 consequently physical resources were not directed to their most productive uses. The essence of the market in this respect is that it minimizes the extent to which non-economic factors influence the allocation of resources and thereby improves this allocation and 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. ^{1/} 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 the process of doing this they acquire valuable information about borrowers and lenders alike which allows them to

^{1/} It is important to note, however, that historically the most important source of finance has 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 to 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 or less in the postwar period. Mayer (1989) provides evidence that bank loans accounted for at least 40 percent of gross financing of non-financial enterprises in France, Italy and Japan, and over 20 percent in Germany, the United Kingdom and the United States over the period 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.

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

While it is not necessary for the FCPEs 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. The judicial system has also not yet experience in adjudicating financial conflicts such as may arise between bond holders and debtor enterprises. For example, most of the FCPEs still lack laws on securitized lending which provide for a central registry of collateral and protection of creditors' claims on pledged assets. ^{1/} In addition, insurance and pension funds, often the most important nonbank financial institutions, are relatively small in the FCPEs and need restructuring. While steps should certainly be taken towards placing these on a fully funded basis and freeing up their investment opportunities, they are unlikely to provide a significant source of capital in the immediate future. One potentially important class of nonbank financial institution is the investment fund which has emerged out of the voucher privatization programs in some FCPEs. These are discussed in Section IV.

Moreover, the FCPEs 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. ^{2/} However, to provide security in these systems it is important to ensure that the participants are creditworthy; which means 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.

^{1/} An exception is Poland which has recently prepared draft legislation on secured lending.

^{2/} See Folkerts-Landau, Garber, and Lane (1993) for a discussion of payment system reform in FCPEs.

However, the development of a competitive banking sector in the FCPEs is fraught with many structural obstacles. 1/ The most immediate problem is that many of the employees in 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, with the exception of 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.

1. Bank recapitalization and privatization

The characteristic of banks in the FCPEs which has attracted, probably correctly, the most attention is the nature of their balance sheets. As a consequence of their regional focus their loan portfolios are frequently concentrated geographically or by industry, resulting in overexposure to the risk of relative economic decline in that region or sector. In addition, their balance sheets often reflect very specialized activities which they were given under the previous regime. For example, it is common for a FCPE 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 the government sector or to other banks. 2/

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, at least 26 percent of the assets of the banking sector in Poland were thought to be nonperforming in 1992, while for the former CSFR and Hungary the corresponding estimates were 21 percent and 11 percent. 3/

1/ The creation of a perfectly competitive banking system is, of course, not the objective. Because of their 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, banks in every country are not subject to perfect competition. Capital and liquidity requirements and the need to obtain a banking license limit competition in the industry. Moreover, there generally are restrictions on banks' activities in individual markets (e.g., prohibitions against underwriting securities issues, position limits in foreign exchange dealing).

2/ The state-owned savings banks continue to dominate markets for retail deposits in most FCPEs, attracting as much as 90 percent or more of household deposits.

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

The proportion of bad loans is highest in the state-owned banks. Under-capitalized banks with large exposures to virtually bankrupt large enterprises may be inclined to roll over outstanding loans and to capitalize interest rather than show losses on their balance sheets or force enterprises into bankruptcy or restructuring. The assumption that insolvent banks will not be shut down, or equivalently, that their loans to state-owned enterprises are backed by the state relieves banks of the need to consider the creditworthiness of their clients and allows them to continue lending to uncreditworthy borrowers. 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. Moreover, until the problem of nonperforming loans to enterprises is resolved, the privatization of both banks and enterprises will likely be delayed.

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. ^{1/} 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 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 quickly resurface.

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 for example--relies on the banks themselves to manage the debt restructuring process, usually by creating a separate loan work-out department. Consequently, the banking sector would be given a central role in the restructuring of state-owned enterprises. Proponents of this approach argue that banks are the only institution with financial expertise capable of restructuring nonperforming loans or forcing enterprises into bankruptcy.

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

^{1/} For a discussion of how the "bad loans" problem arose and of how to deal with it see Fries and Lane (1993).

cannot reach agreement on how to restructure the firm and its finances, as is the case 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 the latter can "grow out" of the problem. The result may be very slow progress in restructuring nonperforming loans or in initiating bankruptcy proceedings. In the meantime, banks may try to push interest rate spreads wider in order to earn their way out of trouble--effectively imposing a tax on financial intermediation to pay for inherited nonperforming loans. Moreover, this approach requires banks to devote significant amounts of human capital to correcting problems inherited from the past rather than improving current lending practices.

In contrast, the 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. It is the task of this institution to determine which loans can be made good by appropriate restructuring of the debtor enterprise and which enterprises are genuinely insolvent and need to be liquidated.

The decoupling of bank reform and enterprise restructuring helps 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 it help prevent a recurrence of the "bad loans" problem, but it would support the imposition of a "hard budget constraint" on state-owned enterprises. The newly restructured and recapitalized banks would be in a position of strength vis-à-vis enterprises that are to be, or have been, privatized allowing them to impose financial discipline. In other words, the capacity to influence management would be increased; for example, it would be easier for banks to refuse new loans to enterprises that show insufficient willingness to restructure.

It is frequently claimed that the centralized and decentralized approaches to resolving the "bad loans" problem differ significantly in their fiscal impact. While the centralized approach may result in a direct infusion of capital from the government to the banks or in the substitution of new government debt for nonperforming loans, the decentralized approach may have no direct fiscal implications. However this apparent difference is not real and is the consequence of adopting too narrow a definition of the government's balance sheet. Since the government is the sole shareholder of the banks and state-owned enterprises, the resolution of their bilateral liabilities--whether by a decentralized or centralized mechanism--will have

no impact on the consolidated balance sheet of the public sector. 1/ The negative net worth of the banks or enterprises is already a government liability and should explicitly be recognized as such before banks or enterprises are privatized. The use of direct fiscal transfers to restructure the banks' balance sheets will only change the nature of these liabilities.

It is worthwhile to note that in practice a purely centralized resolution strategy is unlikely to be possible. Initial estimates of the stock of inherited bad loans are likely to be low so that the stock of loans sold to the central agency will not include all problem loans. Moreover, banks will always make mistakes in allocating credit and have to resolve new problem loans themselves. It would be inappropriate for the central loan resolution agency to take over new loans that are nonperforming.

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 are themselves privatized. 2/ As long as they remain state-owned the possibility that credit allocation decisions will be influenced by political, or other, considerations persists. 3/ Banks can only enforce market behavior in their customers if they themselves operate in a

1/ This is true too of the foreign-currency denominated loans which are a significant proportion of non-performing loans in Bulgaria for example. The issue here is whether the government should replace such loans with foreign-currency denominated assets or domestic currency assets. It is likely that most of these loans are denominated in non-convertible currencies, in which case it makes little difference how they are treated. In principle, if the banks have convertible-currency liabilities, which they do in Bulgaria, then at least part of their assets should be denominated in these currencies.

2/ However it may be more difficult to privatize banks of the decentralized approach to resolving non-performing loans has been adopted because these assets may remain on the banks' balance sheets for a considerable time.

3/ It is clear, from the experiences of the FCPEs in central Europe, that an announcement that banks must adopt market-based lending practices and that bank restructuring and recapitalization programs are being implemented will not in itself necessarily lead to a change in bank behavior. In Bulgaria 38 percent of the non-performing loans outstanding at the end of 1992 had been extended in 1991 and 1992 after the transformation to a market economy had begun. Other FCPEs similarly report that a significant proportion of their bad loans were extended after the transformation process was underway. In Hungary bad debts rose from 2.6 percent of total assets at end-1990 to 11.4 percent at end-1992. In Poland bad debts rose from 16 percent of total credit at end-1991 to 26 percent at end-1992. In the former Czech and Slovak Federal Republic Kc 110 billion in bad debts were transferred to the Consolidation Bank in June 1991, but by September 1992 suspicious and non-performing loans accounted for 21 percent of total loans (OECD (1993b)).

competitive market environment. While the FCPEs have begun the process of privatizing banks, progress to date has been very slow (see Table 2). Meanwhile, the absence of strict licensing requirements in some of the FCPEs 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 under-supervised and are often simply financial agents for the enterprises which own them and have themselves accumulated significant amounts of nonperforming loans to the point of becoming insolvent. 1/ While consolidation of private banks has begun, notably in Bulgaria, Poland and Russia, much more needs to be done if these institutions are to provide healthy competition for the (former) state-owned banks.

Before bank privatization is undertaken on a significant scale it is important to ensure that the general environment under which they will operate is specified. While it is surely not necessary to pass the entire range of financial laws in their detail, 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 in Section IV below. Another important element of this environment is the possibility that bank deposits will be insured. 2/ 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 would be 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 in the event of the failure of their bank.

Finally, the transformation process 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 (i.e., 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. While initially it was expected that equity markets would play a role in the (post-) privatization process, their contribution was negligible. 3/ German banks demanded--and received--guarantees to keep credit flowing to firms in the former East Germany (OECD (1993c)). Likewise, many bank loans granted in the FCPEs in support of the privatization process are part of

1/ Johnson, Kroll and Horton (1993) report on the ownership structure and lending practices of private commercial banks in Ukraine.

2/ In July 1993 the Hungarian government introduced the National Deposit Insurance Fund which will insure Ft 1 million in deposits per account holder in each bank thereby providing coverage for approximately 90 percent of household deposits.

3/ Venture capital funds contributed less than 1 percent of the financing.

government-sponsored programs. While the loans are extended by the commercial banks, they generally are 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.

2. Market structure and the role of banks

Although it has been argued above that in the FCPEs 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. ^{1/}

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, they 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 the first case, in many FCPEs 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 in order to satisfy a

^{1/} Systemic 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.

block purchase, or sell off large blocks in a piecemeal fashion, 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. ^{1/} Dealers will demand credit in order 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" in order 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, in order 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 the case of very large settlement failures. By their nature, 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 which participate in the large-value payment system.

Clearly, the development of securities markets cannot be considered in isolation of the health of the banking sector. It is important to ensure that the banks which provide credit to securities market participants are able to properly assess the risks involved. This means they must have expertise in securities market trading in order to understand the transactions they are ultimately financing, and they must be able to assess the credit risks involved. In addition, 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 discussion suggests that the banks' restructuring and recapitalization should precede their involvement in securities markets and therefore that the development of the securities markets will itself be constrained by the progress in bank restructuring.

^{1/} The 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.

III. Financial Structure and Discipline

1. Privatization and the 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 the privatization process. ^{1/} First, they may be expected to take the lead in restructuring state-owned enterprises. Second, they are expected to mobilize domestic and foreign funds and to 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 advice and other specific services (e.g., 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. ^{2/} Different privatization strategies have been adopted in the various FCPEs 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 over the privatized enterprises by the new owners.

These considerations prompted the authorities in the FCPEs to adopt multi-track approaches to the privatization of large enterprises by using combinations of the following basic methods (Blommestein, Geiger, and Hare, (1993)):

- (a) public offering of shares;
- (b) sales of shares to a private buyer or group of buyers;
- (c) free distribution of shares to the employees or population (e.g., direct transfers of shares, distribution through vouchers, and distribution through intermediaries);
- (d) restitution to former owners;
- (e) buy-outs, buy-ins and other forms of "bottom-up" or "insider" privatization.

For example, the Hungarian approach to privatization has favored methods (a), (b), (d), and especially (e), while the Czech and Slovak

^{1/} See OECD (1993c) for a discussion of the role of financial institutions in privatization in the FCPEs.

^{2/} For recent discussions of privatization in the FCPEs see Earle, Frydman, and Rapaczynski (1993) and OECD (1993a,c).

Republics pioneered the mass privatization approach, (c). Other FCPEs, 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, 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 as part of their own restructuring and recapitalization. Where adopted, voucher privatization has resulted in the creation of investment funds which 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 (a), (b), and (c) 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 promotes 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 which 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 upon the existence of private property rights and market-based financial institutions. These market-based control mechanisms are missing in the FCPEs.

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 which provide an effective corporate governance structure in an economy dominated by private agents. A proper understanding of the factors that shape the structure of corporate control in market economies is key to the analysis of the role of financial institutions in the process of transformation, including privatization.

2. 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 their own welfare at the expense of the welfare of the others. Shareholders and creditors run the risk that managers will take actions which reduce the value of either or both of these claims, while if shareholders have some control over the firm they may take actions which 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). 1/ The essence of such conflict is the inability to observe other parties' actions and 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 sub-optimal 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 which 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. 2/ 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. 3/ 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 to the principal/agent problem exist: using product and labor markets to reward or punish managers' behavior; changes in the firm's capital structure; and introducing direct control mechanisms to enforce efficient

1/ The 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.

2/ In practice however, even central planning does not eliminate agency conflicts. The "ratchet effect" in which future production targets are tied to current output can create an incentive for managers of enterprises to produce less than their current plan targets, despite, the existence of bonuses (see Weitzman (1980)). It is possible that the managers' ability to negotiate future targets and the state's ability to observe both planned and actual output and to discipline managers and employees whose firms produce less than their targets may mitigate this adverse incentive. Central planning does clearly eliminate the agency conflict between claimants on the firm since the state is both the dominant (usually the only) shareholder and, through ownership of the banks, creditor.

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

behavior. The precise structure of corporate control is, therefore, dependent on a number of interrelated factors including:

- (a) shareholders or debt claimants;
- (b) the legal infrastructure, in particular the type of bankruptcy rule and other asset restructuring rules such as loan workouts;
- (c) the relative importance of the banking system (vis-à-vis the capital market) in long-term lending to large enterprises and equity holdings by banks;
- (d) the presence and role of large shareholders;
- (e) the composition and structure of enterprise boards.

Despite the fact that we are able to identify some basic forces that shape the general framework for corporate control by financial institutions, our 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 for 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 which link a significant portion of their income to the market value of the firm. However, in the highly uncertain environment of the FCPEs, the market value of the firm will be dominated 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 or stock options 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. 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. ^{1/} 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 FCPEs this mechanism will again be weakened since it will be difficult to identify the degree of the manager's responsibility for the success or failure of the firm.

^{1/} Managerial "effort" is broadly interpreted to mean the total of their activities and the quality of their decisions affecting the operation of the firm.

a. 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 payments. A 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 in avoiding low-profit outcomes. ^{1/} If they own stock in the firm, managers have a share in all profits earned in excess of interest payments and therefore have the ability to divert corporate resources to less productive, but personally beneficial, uses. 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 and the opportunity to monitor the behavior of the managers and the firm's performance closely in order to ensure that the loan is repaid and to avoid circumstances in which they are forced to continue lending to large firms who threaten to default on their obligations. In addition, a bank can choose to cut off the firm from future lending if it considers it to be a poor credit risk. This is a potentially important sanction since, in evaluating the loan application the bank will have had 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 controlling managerial behavior 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: (a) the inclusion of debt covenants to restrict asset substitution (e.g., limits on dividends and new borrowing, and constraints on the use of funds); (b) the issue of convertible debt instruments and securitized debt; (c) the use of rating agencies to monitor the firms and provide an objective valuation of its debts; and (d) the joint provision of debt and equity financing by banks that are also major shareholders. This latter mechanism is discussed in Section IV below.

^{1/} 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 then they will be less concerned about going bankrupt than if, for example, they want to protect their reputation as effective managers in order 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. The absence of a contractual obligation to make fixed payments reduces the penalty faced by firms in the event of an adverse state of the world. 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 face a disincentive to increase their own effort in making projects successful or an incentive to divert resources and profits to their own uses or engage in other self-promoting activities which 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, if they do not have direct representation on the board of directors or in management, can express their concerns only at infrequent shareholders' meetings. ^{1/} Indirect mechanisms to mitigate the agency conflict between managers and shareholders have been created or have evolved spontaneously: (a) linking managerial pay to performance through ownership of stocks and stock options as well as through the payment of cash bonuses; (b) monitoring by large shareholders and the board of directors; (c) the threat of takeovers; (d) policies on the payout of dividends that limit the scope for managerial discretion through reputational forces; and (e) 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 by, for example, legislating codes of conduct and responsibility for directors, 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 then firms which are perceived to be under-performing relative to potential can be

^{1/} Bondholders are in no better, and probably worse, position than shareholders since they have access to the same information, but no direct means of influencing managerial behavior.

purchased by an outsider who installs a new managerial team which can correct the problems and earn greater profits for the firm. If the firm's shares are traded on an open market then the daily share price provides an indication of the firm's prospects. A potential raider can then determine whether the market value of the firm exceeds or falls short of 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 due to takeovers by, for example, creating 'golden parachutes' which 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. If this free-rider problem is significant then 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 fact.

In the FCPEs 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 the FCPEs which reduces the strength of purely contractual arrangements. However, the control 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 FCPEs will, in principle, allow for concentrations of shareholdings of this sort.

IV. Universal Banks and Capital Markets

1. Universal banks

Many authors have argued that the universal banking system, such as that of many continental European countries--particularly Germany, should be

established in the FCPEs. ^{1/} In fact many FCPEs have already passed legislation providing for the creation of universal banks (see Table 3). In such a system banks provide both commercial banking services 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 for present consideration, universal banks are often permitted to hold significant amounts of equity in the firms to which they lend and to represent themselves and perhaps shareholders whose shares they hold in trust on the boards of directors of these firms.

The central argument in favor of such an arrangement is that by internalizing the debt/equity conflict identified above, universal banking allows for a more efficient allocation of financial resources and one which 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 therefore can discipline poor managers in two ways: by pressing for their removal by the board of directors and by withholding credit. Moreover, the combination of commercial banking and investment banking activities is thought to allow universal banks to capture scale and scope economies 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, it does not necessarily follow that a structure that was appropriate in 19th century Europe, for example, is appropriate for the FCPEs today; in fact there are reasons why 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. Moreover, 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 which 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 similar expertise to that employed in commercial banking: evaluating potential

^{1/} See, for example, Saunders Walter (1992), and Corbett and Mayer (1991). Gerschenkron (1962) and Cameron (1991) have argued that universal banking played a key role in the development of continental Europe.

risks and returns to investments being able to price financial assets. If these skills are not well developed then 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 in the banks' core lending activities. Moreover, there is no reason to believe that bankers would 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 need therefore to establish strict internal guidelines which 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 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 the supervision and regulation of universal banks are much more difficult than they are for narrower commercial banks or investment banks. As a simple prescription, banks should not be allowed to engage in activities which regulators cannot be certain they can monitor. If bank supervision and regulation is weak, which is the case in the FCPEs, then 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 at a later stage, 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 to separately capitalized subsidiaries in order to ensure that the failure of the securities business does not affect the capital which supports the commercial banking activities.

Finally, Steinherr and Huveneers (1990, 1992) and Muldur (1992) find no evidence of economies or 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 during 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 at least of 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.

2. Capital markets

Capital markets in formerly planned economies have, potentially, 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 non-inflationary 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 the FCPEs are ill-equipped to perform these tasks in the immediate future. Existing equity markets are small and there is generally insufficient trading of stocks to support significant new issues--and much of the trading that does occur is unregulated and unsupervised. ^{1/} In addition, in the current inflationary environment in many of these countries corporations are reluctant to issue bonds with yields that would make them attractive to investors. 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 for transferring ownership rights--and thereby giving real meaning to privatization.

a. 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. While 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 and/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 a difficult and time-consuming task in which there is an important role for the authorities. While it is preferable that the actual structure of the market--i.e., exchange trading versus OTC; brokers versus dealers; call market versus

^{1/} Section IV.2.c below discusses the recent development of securities markets in the European FCPEs.

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 of all, as indicated above, high 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. 1/ Efficient clearing and settlement of securities transactions depends on the existence of a banking system capable of providing liquidity to securities firms and clearing houses. The delay in providing appropriate clearing and settlement systems due to problems with the large-value transfer system for domestic payments and/or the inability to process the potentially large volume of securities transactions of low value has been an important constraint on market development in the FCPEs.

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 in the absence of standard financial statements and with almost meaningless historical price and output figures make objective pricing extremely difficult. 2/ Instead, there will be a highly subjective element in any pricing rule. Therefore, for the foreseeable future, prices will be highly unreliable. Nor will it be any easier to price the investment trusts. Moreover, simply because they may hold large portfolios it does not follow that they will be much less risky investments than individual firms. The most important source of risk in the economy is likely to be political risk, which cannot be diversified away.

It is important also 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; bankruptcy law; and securities legislation prohibiting market manipulation and fraud and specifying penalties for infractions. Such legislation requires a body which is empowered to enforce the law, capable of carrying out sanctions and removed

1/ See Blommestein (1993), Summers and Blommestein (1993), and Folkerts-Landau, Garber, and Lane (1993).

2/ The Czech experience demonstrates how difficult it is in the FCPEs to estimate the market value of a share in equity which has never before been traded. On the Prague Stock Exchange, exchange rules originally prevented the price of a security from rising or falling more than 10 percent--20 percent for stocks which had never before been traded--in one session. When the first 957 "unlisted" stocks were quoted activity was limited to only a small number of stocks--fewer than 50. To encourage liquidity, the rules were changed in July 1993 to allow for a 20 percent daily change--50 percent for newly-traded stocks. As a result, over the next two trading sessions average share prices declined by over 40 percent and turnover doubled.

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 business involved.

Investor confidence is important to the continuation of any asset market, particularly so in the FCPEs where there is limited experience with trading financial assets. 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.

This brief examination of the immediate prospects for well-functioning equity markets in the FCPEs 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, key participants in equity markets in industrialized countries are so far missing in the FCPEs--private pension and insurance funds. These contractual savings institutions, when fully funded and permitted to invest in equity, and bonds too, 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 significant new capital. 1/

b. Bond markets

In more developed capital markets firms raise capital by issuing debt securities of their own (e.g., commercial paper, corporate bonds). The attraction of these instruments is that they provide cheaper and more flexible sources of finance than, say, bank loans because they reduce the role of the intermediary between the firm and the ultimate investors. Investors hold corporate debt because they provide an attractive return and

1/ The so-called "emerging markets" provide an indication of how well equity markets in FCPEs might function. A number of common characteristics can be identified: (a) 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; (b) these markets are highly illiquid, with trading concentrated in only a small subset of the firms listed; (c) they are volatile, with the average weekly rate of change in the index exceeding that of the more developed markets; (d) they are prone to speculative bubbles and collapses; (e) they are vulnerable to fraudulent activity.

because they are tradeable assets and so are not significantly less liquid than deposits.

However, access to the bond market is usually restricted to only the most profitable and reputable firms. This is because holders of debt securities generally are less able to monitor managers' behavior than are banks and perhaps even equity investors. They therefore will generally only be prepared to invest in debt securities 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 can leave it to the rating agency to monitor the quality and activities of the firm's management, the return on its 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 market requires the same institutional and regulatory preconditions as that of the equity market. In addition, the existence of liquid markets in bonds with shorter maturities is a general precondition for issues of longer-maturity bonds. Clearly therefore, the government's financing activities will assist in the development this market. By providing a relatively safe, homogeneous asset with a range of maturities the government can build up investors' experience with trading financial assets, thereby providing a pool of potential investors, and facilitate pricing of longer-maturity instruments. The development of the bond market is also supported by interest rate deregulation.

c. Capital market development in central Europe

Capital markets in the FCPEs are still at a relatively early stage of development (see Tables 4 and 5). There are stock markets in Bulgaria, Hungary, Lithuania, Poland, Slovenia, Ukraine, the former Yugoslavia and the Czech, Russian and Slovak Republics; but with the possible exception of the Warsaw Stock Exchange (WSE), where weekly turnover recently reached record levels in excess of \$100 million, these exchanges see very little activity. The Budapest Stock Exchange (BuSE) is open five days a week, but weekly stock turnover is usually on the range of \$1-4 million. The Prague Stock Exchange (PSE) generally has turnover of less than \$100,000 with one day of trading per week, while turnover on the Bratislava Stock Exchange (BrSE) in listed and unlisted stocks is usually less than a tenth of that amount. With the exception of the PSE, there are few issues listed and even fewer see active trading. The BrSE has 15 stocks quoted, the BuSE has 23 and even the WSE has only 19 stocks on the main market. In each market trading is

dominated by transactions involving one or two companies. Finally, reporting requirements are often weak--for example, the unlisted stocks on the PSE and BrSE are not required to provide any information--and supervision of these markets is still incomplete.

Much of the securities trading takes place outside the organized exchanges and is therefore almost entirely unregulated. Over-the-counter (OTC) trading in equity in the Slovak Republic was recently estimated to exceed trading on the BrSE by a factor of ten. The third round of trading on the RM System, an electronic OTC stock trading system which competes against the PSE and BrSE, had turnover of Kc 1.05 billion in the Czech Republic in September, compared to weekly PSE turnover of less than Kc 14 million. In the Czech Republic block trading of equities--in which the transaction is made outside the exchange but registered on the exchange--exceeded on-exchange trading by a factor of nine in early September 1993. The details of block trades however--especially the prices--are not disclosed. 1/ In both the Czech and Slovak Republics trading has so far been dominated by the investment funds.

Generally speaking, with the exception perhaps of the WSE, capitalization and turnover are simply too low--even including OTC trading--and the number of issues being actively traded is too small to provide hope that firms can raise significant amounts of new capital in the immediate future. 2/ In addition, the markets are extremely volatile, often driven by frenzied buying of only a small number of stocks and often tainted by the suspicion of illegal trading activities.

There are comparatively active bond markets in most of the FCPEs. Indeed, turnover on the PSE, BrSE and BuSE is dominated by trading in bonds. Until recently 90 percent of the turnover on the BuSE was in bonds, although that proportion has now fallen to about 70 percent. On the PSE and BrSE the proportion of on-exchange trading accounted for by bonds exceeds 80 percent. However, with the exception of one corporate bond traded on the PSE, these are government bonds. The few corporate bond and commercial paper issues that have been made have tended to be privately placed and were mostly issued by foreign multinationals or joint ventures.

1/ This situation may have been reversed recently in the Czech Republic. With the listing of Ceska Sporitelna and Komerčni Banka on the PSE--formerly the most heavily traded stocks on the Czech RM System--stock turnover on the exchange rose to Kc 6.8 million on September 21 while off-exchange block trading was only Kc 1.1 million.

2/ Of the 25 emerging stock markets surveyed by the International Finance Corporation in June 1993, Hungary had the smallest capitalization, at \$498 million, while Poland had the third-smallest capitalization at \$849 million (International Finance Corporation, (1993)).

3. Investment funds

The previous sections suggest that the financial systems in the FCPEs may not yet be capable of providing the two services identified as essential to the transformation to a market economy: directing resources to their most efficient uses--e.g., for restructuring purposes--and providing effective corporate governance. Several countries have therefore created new types of financial institutions--hybrid investment funds (IFs)--adapted to fit the special economic circumstances they face: a shortage of domestic savings, rudimentary capital markets, and difficulties in evaluating risks. The innovative feature of these hybrid funds is that they are intended to play a three-fold role (Blommestein, 1992b): (a) serving as a mechanism for the transfer of ownership to large segments of the population, while permitting portfolio diversification to small investors; (b) playing an important corporate control role in privatized enterprises; and (c) 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.

Investment funds have been an important element of the Czech and Slovak mass privatization program. This program issued to individuals, for a modest fee, books of vouchers which could be used either to bid for shares in individual enterprises or they could be exchanged for shares in IFs which used the vouchers they accumulated to acquire shares. Approximately 70 percent of the shares of privatized enterprises are owned by IFs. In the Polish program 20 IFs will be created, each holding 33 percent of the shares of 30 enterprises and smaller stakes in the other 340 companies initially included in the mass privatization program.

The role of the IFs is essentially to concentrate capital ownership and thereby create large shareholders with an incentive to exercise control over, and to manage the restructuring of, the firms in which they have majority stakes. 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. ^{1/}

The combination of what are essentially investment banking and portfolio diversification services is what makes these funds unique and which complicates their design. For example, it is probably inappropriate to model these funds on open-end mutual funds as found in industrial countries, although both closed-end and open-end funds have been created in some of the FCPEs. Open-end funds must continually ensure sufficient

^{1/} In Poland tenders for foreign management teams for the IFs were issued in September 1993. To offset the possibility that oligopolistic behavior on the part of the IFs would simply replace similar behavior by former state-owned enterprises, entry into the IF industry should be relatively free of restrictions. This is the case in the Czech and Slovak Republics. However in Poland the number of IFs is fixed at 20.

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 likely 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 significantly, 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 the IFs up as closed-end funds or by restricting redemptions during an initial period. However, it would be permissible for individuals to trade in IF shares among themselves on a secondary market. In this way the initial capital base of the IFs would at least partly be protected--it would fluctuate with the value of the fund's investments of course--while promoting the development of an equity market. The latter effect will 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 enterprise's shares make it very difficult to value IF shares reliably. They are therefore likely to suffer from thin trading and high price volatility. In the same vein, the portfolio diversification benefits of IFs should not be overestimated. The overwhelming sources of uncertainty during the transformation are systemic in nature and therefore non-diversifiable. This tendency for the value of all enterprises owned by the IFs to move together is exacerbated if the IF managers have decided to channel the bulk of their investments to a few sectors.

The investment banking operations of the IFs could be arranged in one or both of two broad patterns: the IFs could simply assist enterprises in their search for external investors and creditors, in which case the loans, for example, would be made directly from commercial banks to the enterprises; or the IFs 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 IFs 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. Somehow, therefore, the regulation of FCPEs' investment funds must 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 IF managers. Such activity, and illicit financial transactions generally, would undermine confidence in financial markets generally

(Blommestein (1993b), (1992b)). Regulation therefore should take into account the unique objectives and features of the IFs, but should be stringent in fighting against fraud and serious conflicts of interests.

4. Markets for derivative securities

As the title of a recent working paper demonstrates, the possibility of introducing markets for financial derivatives in the FCPEs has already been considered. 1/ Indeed such securities are already available in some of the FCPEs and are being planned for others. 2/ The arguments in favor of their introduction are 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.

Careful reflection of the mechanisms for trading derivatives should make it clear that in most instances such markets are not presently viable in the FCPEs. The principal use for these 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 provide the basis for effective hedging if there is a highly liquid market for the underlying instrument. 3/ This means, for example, that there should be liquid spot foreign exchange and money markets. 4/ Moreover, these markets rely heavily on settlement and payment systems and on bank liquidity to satisfy margin requirements on futures exchanges.

1/ Antowska-Bartosiewicz and Malecki (1992): "Does Poland Already Need Forward, Futures and Options Financial Markets?"

2/ In Hungary the Budapest Commodities Exchange (BCE) and the BuSE have both introduced futures contracts for U.S. dollars and Hungarian government bonds. Stock futures and/or options are also traded on the BuSE and the Bratislava Options Exchange (BOE). 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. However, this activity is entirely unregulated.

3/ Remarkably, the Bratislava Options Exchange opened, and provided a market for equity options, four days before the Bratislava Stock Exchange opened.

4/ Interbank foreign exchange markets are relatively new in the FCPEs, but reasonably liquid markets are emerging in Hungary and Poland and in Moscow. In Hungary for example, the 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 per day.

More fundamentally, liquid markets for the government bonds or currencies underlying the contracts are needed in order to price the derivative securities in the first place. In the absence of a liquid underlying market there is little guidance for prices in the derivatives markets and investments in these securities would be essentially 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 won't 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. Derivative markets can be used to take highly levered positions easily exceeding the capital base of the securities firm or bank that either takes the position or backs it up with credit. If banks are not adept at credit risk evaluation then their involvement in derivatives markets could have serious systemic repercussions.

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

1. Restructuring of the 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: (a) the establishment of a two-tier banking system by separating central banking operations and commercial banking functions; (b) providing the central bank with the means to conduct monetary policy and to supervise the banks (Blommestein (1993)); and (c) granting greater autonomy to the banks in making lending decisions on the basis of commercial criteria.

Much of the legal and accounting framework has been put in place. ^{1/} The existing legal framework allows the central banks to issue regulations covering reserve requirements, liquidity, foreign-exchange exposure, lending limits to individual clients, and capital adequacy (see Table 3). However,

^{1/} An important exception is bankruptcy law. While most FCPEs have introduced new or revised bankruptcy laws they generally lack the capacity in the court system to handle the large number of cases that will be brought forward. In Hungary bankruptcy law came into effect at the beginning of 1992. Fries and Lane (1993) report that by the end of the year 3,658 restructuring and 7,062 liquidations had been registered at the courts--affecting 9 percent of enterprises and 33 percent of GDP--but only 27 had been completed.

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 loans primarily to inefficient and loss-making state-owned enterprises. Bank lending remains biased to these same firms due to "captive-lending" relations (Blommestein (1993)). Consequently, the asset portfolios of the larger state-owned banks (and some of the smaller private banks) are highly illiquid. In addition, the amount of non-performing loans is substantial and appears to be growing (see Table 2 and the discussion in section II.1 above).

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). In the Czech and Slovak Republics and in Hungary some nonperforming loans have been transferred to central agencies while in Poland the decentralized approach has been adopted and the banks have transferred nonperforming loans to special "work-out" departments where restructuring agreements are made between the bank and the borrower or bankruptcy proceedings are initiated. In Bulgaria pre-1991 debt has been guaranteed by the government while in Romania much of the loans made before the transformation process was begun have been written off. In each country large fiscal transfers have been made--or, in the case of Poland, will be made--to recapitalize the banks. However, despite these measures, bad loans continue to accumulate.

It is a positive sign that the privatization of banks have begun, however progress has been very slow. 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. On top of their financial weakness, banks lack adequate numbers of personnel who possess modern banking skills. Rather than supporting the transformation process at present, the weak banking system is a serious obstacle through the continued misallocation of capital to the state sector, while crowding-out creditworthy new entrepreneurs and recently privatized enterprises. The growth of inter-enterprise arrears in the region is one more piece of evidence of the adverse incentive structure that also underlies the disfunctioning of the banking sector. Finally, the underdeveloped and fragile state of the banking system is also hindering the development and functioning of the capital market, including investment funds.

2. The development of capital markets and investment funds

The first stock exchange to re-open its doors in Central and Eastern Europe since World War II was the Budapest Stock Exchange (BSE) in June 1990. Transactions in Treasury bills, corporate bonds and company shares on the BSE 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, in order to ensure an adequate level of investor protection. The BSE started with a two tier structure: the first tier for listed securities, and the second tier 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 BSE. ^{1/} 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 around 20 quoted companies, 64 percent of trading in 1991 was in the shares of just 3 companies. Very few of the companies listed or registered on the BSE 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 not more companies did the same are that (a) external funds can more cheaply and easily raised through debt instruments and the thriving OTC market; and (b) 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 BSE index went from 1000 in January to a peak of 1200 in March to around 800 where it remained for much of 1992. In response, the stock exchange authorities launched a third tier to its market in June 1992, in a move to draw OTC trading onto the market floor. The third tier is meant for the trading of securities which do not meet the full listing requirements but a newly formulated, simplified set of rules.

The Warsaw Stock Exchange (WSE) was re-opened in July 1992, with offices in the former headquarters of the communist party. The legal basis for the WSE is the Law on Public Trading of Securities and Trust Funds of April 1991. Yet in early 1989 some trading in securities was already taking place, mostly stocks, 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; this law allows, *inter alia*, 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 stock brokers had been licensed. Many of the companies quoted on the WSE are enterprises privatized through an IPO. Since the Polish mass program has still not yet been launched, the volume and value of stock trading on the WSE will continue to develop gradually in the future. The government securities market developed fairly rapidly. This market is relatively liquid, underpinned by modern secondary market arrangements. The sophisticated clearing and settlement system of government securities is also used for other securities.

Capital market legislation for the Czech and Slovak Republics is in place and stock exchanges began operating in Prague and Bratislava in

^{1/} See Apathy (1993) for a detailed account.

April 1993. On both stock exchanges, trading in listed and unlisted securities is allowed. 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 amongst themselves rather than on the exchanges.

It was explained above that special investment funds (IFs) are intended to play an important role in the mass privatization process of some countries and that both OECD-type and so-called hybrid IFs are also expected to contribute to the development of capital markets. In Poland and the Czech and Slovak Republics, IFs are to play a three-fold role: (a) to allocate vouchers and to permit portfolio diversification by small investors; (b) to support and strengthen management; and (c) to mobilize capital for restructuring purposes. In contrast, in Hungary, IFs are primarily designed as conventional investment funds to collect savings from small investors. No direct role in the process of privatization is envisaged for IFs in Hungary. The Polish authorities expect that IFs will play an important role in both the restructuring and privatization of large enterprises as part of the Polish mass privatization program (see Blommestein (1992b); and Szomburg (1993) for details). Indeed, hybrid IFs are seen as an institutional innovation to speed up the restructuring process as well as to contribute to a more efficient corporate governance structure in the form of better control and supervision of management performance.

However in Poland a fixed number of funds is being envisioned, and their portfolios are being allocated to them, so there will be limited scope for competition between funds. It is also not yet clear how they will be wound down in ten years. One possibility is that they will simply be transformed into mutual funds and removed from any direct managerial role. If alternatively they are to be completely shut down then it will be important to determine how. If fund managers' compensation is linked to the performance of their portfolio they will have an incentive to sell off only the least profitable companies, leaving the final disinvestment to deal with the most profitable companies all at once. If they have to suddenly sell their stakes in all of their holdings then the current problem faced by the privatization authorities--that of trying to sell hundreds of companies into a small and illiquid market--may simply be repeated ten years later.

IFs in the Czech and Slovak Republics are playing an important role in the allocation of vouchers. The nine largest funds--there are more than 400--control almost half of all voucher investment points. Thus, the ownership transfer phase of the voucher privatization scheme has been

completed. ^{1/} It remains to be seen how the IFs will behave in their corporate governance role. It is likely that some of the IFs (in particular those who are seriously undercapitalized) will be under considerable pressure to raise cash by selling on the capital market; this might also be the type of IFs that will behave more like OECD-type portfolio managers. Other IFs 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. However, since IFs are restricted to owning no more than 20 percent of an individual company, it is possible that they will thereby be prevented from exercising any control over the management of the firms and unable to divest themselves quickly of their holdings because the secondary market is too thin.

VI. Conclusions

The two most important contributions of financial institutions in the transformation from central planning to a market-based system are the maintenance of a corporate governance mechanism and the provision and allocation of 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 presently are in many of the FCPEs, the banks are 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.

^{1/} Legal title to equity was transferred to shareholders--individuals and IFs--in May 1993. Foreigners could not participate directly in the voucher privatization scheme, but they are allowed to buy shares in the secondary market.

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

	Czech and Slovak Federal Republic ^{1/}	Hungary	Poland	Bulgaria	Romania
No. of state-owned commercial banks ^{2/}	2	4	9	59	4
No. of state-owned foreign exchange banks ^{2/}	3	1	3	1	1
No. of state-owned savings banks ^{2/}	2	1 ^{3/}	1	1	1
No. of other state-owned, specialized banks ^{2/}	1	11	3	8	1
No. of private sector banks (of which: have foreign stake) ^{4/}	43 (18)	32 (18) (1992) 38 (15) (1993)	33 (7) (1992) 72 (7) (1993)	7 (3)	9 (5)
State-owned banks' assets as percentage of total banking system assets	43 (1991)	75 (1992) 85 (1993)	70 (1992) 20 (1993)	...	80 (1992)
Household deposits as percentage of savings bank deposits	100 (1990)	80 (1987)	75 (1992) 30 (1993)	100 (1990)	90 (1992)

Sources: Official government reports and documents.

^{1/} On January 1, 1993 the CSFR split into two independent states--the Czech Republic and the Slovak Republic.

^{2/} At time of creation of two-tier banking system.

^{3/} Excluding savings cooperatives.

^{4/} Most recent data; excludes representative offices; for CSFR includes 5 privatized banks

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

	Czech and Slovak Federal Republic 1/	Hungary	Poland	Bulgaria	Romania
1. Loan classification	Standard, Substandard, Suspicious, Nonperforming (1992)	Standard, Substandard, Doubtful, Bad (1991)	Pass, Substandard, Doubtful, Loss (1992)	Only passed due payments are classified.	...
2. required "Loan-loss" reserves	Substandard - 20% Suspicious - 50% Nonperforming - 100%	Substandard - 20% Doubtful - 50% Bad - 100%	Substandard - 20% Doubtful - 50% Loss - 100%	Determined by the central bank.	...
3. Incentives for "loan loss" reserve creation	2% of average medium and long-term credit and 10% of over-due 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% of pre-tax profits to cover principal, but there is no ceiling on reserves set aside to cover capitalized interest.	...
4. Amount of Problem Assets (local currency)	Suspicious - Csk 55 b (1992) Non-Performing - Csk 75 b (1992)	Bad - Ft 125 b (1992) - Ft 167 b (1993) Doubtful - Ft 90 b (1992) - Ft 98 b (1993) Substandard - Ft 50 b (1992) - Ft 41 b (1993)	...	lev 32.9 b of pre-1991 loans; lev 20.2 of post-1991 loans (end-1992) lev 75.11 b in pre-1991 loans (May 1993)	Lei 122 b (end-1990)
5. Problem assets in (a) all banks; (b) state-owned banks (in percent of total)	(a) all banks: 21%	(a) all banks 11% (1992) (b) 4 largest state-owned banks: 15% (1992); 18% (1993)	(a) all banks: 26% (1992); 19% (1993) (b) 9 state-owned commercial banks: 30-60% (1992)	35.7% of credit to non-government sector (end-1992); 40.8% (end-June 1993)	...
6. Balance sheet restructuring of state-owned banks	Csk 110 b of revolving inventory loans (pre-1990) transferred to newly-established state-owned Consolidation Bank in 1991 along with some associated bank liabilities.	Government guaranteed Ft 10.5 b pre-1987 enterprise debt (1991); restricted dividend policy (1991-92); Ft 102.4 b in "bad" assets (loans that were 360 days past due, or loans made to bankrupt or liquidated companies) were transferred to newly established state-owned fund, Hungarian Investment and Development Co. (HID) in March 1993.	"Doubtful" and "loss" assets are transferred to separate "work-out" units in each bank. The Law on Mutual Settlement of Debt provides for a secondary market for loans, and for debt-equity swaps (effective 1993).	Government guaranteed the principal and interest payments on all non-performing pre-1991 loans to state-owned enterprises plus interest capitalized since end-1990.	Corporate debt: lei 280 b written off against gov't deposits in banks (1990); lei 125 b refinanced by central bank (1990); lei 135 b (pre-1990 debt) written off (1991). Agricultural debt: lei 65 b of 1984-88 debt written off against gov't deposits (1990), lei 111 b (1989-90 debt) written off (1992).

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

	Czech and Slovak Federal Republic ^{1/}	Hungary	Poland	Bulgaria	Romania
7. Recapitalization of state-owned banks	Csk 50 b of 5-yr state bonds carrying market interest rates transferred to banks in conjunction with loan transfers to Consolidation Bank (1991).	HID issued Ft 82 b in 20-yr bonds with interest rate linked to 90- day T bill rate to banks in conjunction with asset transfer covering 50% of pre-1992 bad assets, 80% of 1992 bad assets and 100% of claims on state- owned enterprises named by the State Property Agency (1993). Further recapitalization to 4% capital ratios is planned for 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 b 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 work- out department; (3) submit a loan portfolio restructuring plan to the Ministry of Finance.	Leva 5 b (the maximum allowable annually) in state bonds carrying an interest rate of 1/3 of the base rate transferred to banks in conjunction with write-off of non- performing assets (1992). Parliamentary approval is pending for further recapitalization through issues of 20-year leva- denominated bonds bearing interest rates starting at 1/3 of the base rate and rising gradually to the full base rate. 10-year foreign- currency bonds will carry a Libor rate.	Gov't provided lei 95 b in capital transfer (1991-92).
8. Bank privatization strategy	Banks included in the mass privatization by voucher program (1992). State retained 37-53% of shares.	Target ownership structure: foreign = 25%, state = 25%, portfolio investors = 50% by end- 1996.	For the 9 state-owned commercial banks the target ownership structure is: foreign investors = 20-25%, state = 30%, employees = 10%, portfolio investors = 35-40%. For other state-owned banks privatization is on a case-by-case strategy.	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% state through State Ownership Fund.
9. No. of banks privatized	5	--	2	--	--

Sources: Official government reports and documents; The Hungarian Economy: Central European; Khan and Clifton (1992).

^{1/} On January 1, 1993 the CSFR split into two independent states--the Czech Republic and the Slovak Republic.

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

	Czech and Slovak Federal Republic <u>1/</u>	Hungary	Poland	Bulgaria	Romania
Universal Banking?	Yes	Yes	Yes	Yes	Yes
Limits on equity participation by banks	Participation in non-banks limited to 25% of capital and reserves without prior consent of central bank; may acquire a 10% share of capital of non-bank without prior consent of central bank.	Long-term investments in non-financial institutions limited to 15% of warranty capital for commercial and specialized banks and 40% of warranty capital for investment banks. No bank can hold more than 51% share in non-financial firms. Sum total of shares held by a bank in a non-financial institution may not exceed 60% of warranty capital. Above calculations can exclude securities held by the bank for less than 6 months.	Participation in other institutions (including loans) limited to 25% of capital and reserves without prior consent of central bank.	10% of share capital of non- bank without prior consent of central bank; excludes shares and interests acquired in debt settlement provided they are sold within 3 years. Sum total of investments of bank in immovable property, equipment, shares and interest in non-financial undertakings limited to own capital.	20% of share capital of non- bank without prior consent of central bank.
Minimum capital requirements for opening a new bank	Foreign owners of universal banks: \$10 m or equivalent in crowns or convertible currency	\$12 m for commercial bank; \$6 m for specialized or investment bank.	Foreign owners: \$6 m or equivalent in convertible currency. Domestic owners: Zl 70 b	Domestic operations only: leva 200 m. Domestic and foreign operations: leva 500 m.	20 b lei (1992)

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

	Czech and Slovak Federal Republic ^{1/}	Hungary	Poland	Bulgaria	Romania
Limits on ownership of banks	<p>Foreign financial institutions' participation in privatization of state-owned banks limited to 25%; this can be waived on a case-by-case basis.</p> <p>Nonbank share cannot exceed 10% of bank capital without prior consent of the central bank.</p>	<p>With the exception of financial institutions, maximum stake for a single investor is 25% (limitation applies to the government from 1997).</p> <p>Total foreign participation in banks in excess of 10% requires government approval.</p> <p>Foreign financial institutions' participation in privatization of state-owned banks limited to 25%.</p>	<p>Government will determine limits on size of foreign investors' equity stake in privatization of state-owned banks.</p> <p>Ownership of any individual shareholder limited to 50% of bank's capital.</p>	None	None
Risk-weighted capital adequacy requirements	<p>Banks established before 1991:</p> <p>(a) 6.25% by end-1993</p> <p>(b) 8% by 31/12/96</p> <p>New banks: 8%</p>	<p>Banks established before 1991: 8% by 1/1/93, according to Hungarian accounting standards (including 4% core capital); central bank can grant exemption until 1994.</p> <p>New banks: 8%</p>	<p>Banks established before 1989: 8% with transition period and intermediate targets determined on a case-by-case basis by the central bank.</p> <p>New banks: 8%</p>	8%, transition period to be determined.	8% by end-1994
Bankruptcy Law	<p>Bankruptcy Law enacted 1991--implementation postponed to April 1993.</p> <p>Banks can initiate bankruptcy proceedings.</p>	<p>New Bankruptcy Law came into effect 1/1/92.</p> <p>Debtor <u>must</u> declare bankruptcy if any payment obligations are overdue by more than 90 days.</p> <p>Liquidation procedure can be initiated by banks.</p>	<p>Bankruptcy Law dates to 1934, amended by the Insolvency Act of 1990.</p> <p>Banks can initiate bankruptcy proceedings or liquidations under the Law on State Enterprises.</p> <p>Law on Mutual Settlement of Debts (effective 1993) gives banks the lead role in negotiating creditor agreements with firms.</p>	<p>No separate bankruptcy law; temporary provisions part of 1989 decree on Economic Activity.</p> <p>Banks can initiate bankruptcy proceedings.</p>	<p>Bankruptcy Law of 1887 still in effect; new legislation before parliament.</p> <p>July 1992-Law 76 allows banks to initiate bankruptcy proceedings.</p>

Sources: Official government reports and documents.

^{1/} On January 1, 1993 the CSFR split into two independent states--the Czech Republic and the Slovak Republic.

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 Rep. (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	Federal 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% fluctuation--50% for previously untraded stocks). Prague Stock Exchange trades on Tuesdays--plan to add Thursday sessions in October 1993; Bratislava Stock Exchange trades listed stocks on Tuesdays; and unlisted stocks on Wednesdays.	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% fluctuation allowed) Monday, Tuesday, Thursday, 10:30-1:00
Clearing and settlement	Centre for Securities (SCP) in each successor republic; book-entry	Book-entry through the Central Clearing House and Depository for BSE trades, physical transfer for OTC 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-mo. Treasury bonds: 2-, 3-yr. State bonds Rehabilit. Bonds: 5-, 10-yr	Treasury bills: 5-day, 1-mo. State bonds	Treasury bills: 30-, 90-, 180-, 360-day Treasury notes: 1-yr. State bonds: 2-, 3-, 4-, 5-yr	Treasury bills: 4, 8, 13, 26, 39, 52 weeks Treasury bonds: 1-, 3-yr. bonds convertible into shares in privatized enterprises
Corporate paper	commercial paper bonds: up to 5-yr.	bonds	commercial paper bonds: 1-, 2-yr	...
Stock exchange	Initial capital = Kc 120 m (\$4.3 m) 1st day turnover: Kc 4.4 m Aug. 20 turnover: Kc 1.7 m in stocks, Kc 7.5 m in corporate and government bonds Stocks: 957 unlisted, two listed; 3 bonds listed, one unlisted; 53 stock exchange members Foreign trading restricted to 1/3 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 BOE 53 stock exchange members	End-1992 capital.: Ft 47 b in equity, Ft 155 b in bonds 1992 turnover: Ft 33.7 b (82% in bonds) Aug. 25-29 turnover: Ft 252.4 m in stocks, Ft 85.2 m in bonds 26 stocks, 11 bonds, 9 Treasury bills, 1 compensation coupon, 4 investment funds, stock options DM, \$, government bond futures at BSE; DM, \$ futures at BCE 44 stock exchange members, approx. 1/3 foreign	End-1991 capital.: Zl 1,500 b End-1992 capital.: Zl 3,500 b Aug. 26, 1993 capital.: Zl 33,209 b End-1991 turnover: Zl 150 b/month End-1992 turnover: Zl 352 b/month Week ending Aug. 20 turnover: Zl 2,115 b in stocks, Zl 30 b in bonds 19 stocks (plus one on parallel market), 6 bonds traded 29 stock exchange members
Taxation	1% bond administration fee 25% withholding tax	...	Certain purchases of Hungarian shares are tax deductible	Dividends taxed at 20% Capital gains generally tax exempt

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 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 IFs	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 % of the market value of privatized enterprises, estimated at Kc 522 billion.	State Property Agency had Ft 814.6 b in assets at end-May, 1993 and had sold Ft 105.2 b in assets since March 1990.	...
Investment restrictions	<ul style="list-style-type: none"> - No more than 10 % of fund assets may be invested in one issuer's securities, except for state bonds. - No more than 5 % of fund assets may be invested in one piece of real estate or movable asset. - Fund may not invest in more than 20 % of the securities issued by one issuer. 	...	Up to 10 % of a bank's assets can be invested abroad or in other than publicly traded securities. No more than 5 % of its assets can be invested in the securities of a single issuer.
Types of Funds	<u>Private:</u> Czech and Slovak American Enterprise Fund Czechoslovakia Investment Corporation, Inc. Some 400 or more investment funds emerged during the voucher privatization process.	<u>Private:</u> 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	<u>Private:</u> 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.

