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*The Design of Financial Systems for the
Newly Emerging Democracies of Eastern Europe*

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Appropriately designed capital markets are important in sustaining reforms in developing countries, and in the newly emerging democracies of Eastern Europe. Understanding capital markets involves understanding the links and distinctions between the two functions in which capital markets engage: intertemporal trade and risk spreading. Capital markets are different from ordinary markets, which involve the contemporaneous trade of commodities, since in capital markets money today is exchanged for a (often vague) promise of money in the future. This distinction plays an important role in explaining why capital markets cannot be, and are not run as, conventional auction markets, and why as a result there may be credit (and equity) rationing. The economic theory of financial markets is applied to five problems particular to the transition of the emerging democracies of Eastern Europe: (i) the establishment of a "hard" budget constraint in financial institutions, (ii) the creation of new institutions, (iii) the problem of inherited loan portfolios, (iv) the introduction of competition in the financial sector, and (v) the relationship between finance and corporate control.

If capital is at the heart of capitalism, then well functioning capital markets are at the heart of a well functioning capitalist economy. Unfortunately, of all the markets in the economy, the capital markets are perhaps the most complicated and least understood. Few governments leave capital markets to themselves—they are affected by a host of regulations and government policies. Moreover, the structure of capital markets appears, in some important respects, vastly different among major capitalist economies. Are the differences inessential, perhaps a consequence of different historical experiences, but having no more substance beyond that? Are they important, each reflecting an adaptation to the particular cultural or economic circumstances of their own countries? Or are some more conducive to economic success, with the solid economic performance of some countries being a consequence of their well designed capital markets, the poor performance of others being in part a consequence of ill designed capital markets?

To a large extent, the form of capital markets observed in the more developed countries is the consequence of an historical process. Technologies have changed everywhere, but nowhere so much as those that affect capital markets. These markets are transactions intensive; banks are involved in recording millions of debits and credits a day. And the computer revolution has, first and foremost, lowered the costs of such transactions. To those in the more developed countries, it is not apparent that the capital markets that they have inherited are the appropriate ones for the technologies of the twenty first century. But change is not costless, and the evolution of financial systems, even when confronted with quite serious problems, appears to be a slow process.

The newly emerging democracies of Eastern Europe face difficult choices in designing (or failing to attempt to design) capital markets. The choices they make will have a bearing not only on the efficiency with which capital is allocated, but also on the macroeconomic stability and performance of their economies. In a way, though, they have an advantage over other developed economies: they may have wider scope for choice, less encumbered by current institutional forms. But this, too, places a heavier burden on them: they should know that the choices they make now may not be easily undone. Institutions once established are not easily or costlessly altered.

My objective in this brief talk is not to lay out a blueprint for the ideal set of capital markets, but rather to help frame the discourse. On another occasion, some nine months ago, when I was asked to talk about agricultural policies for these economies in transition, I found myself in the uncomfortable position of an American saying, "Do as we say, not as we do." Our agricultural policies are hardly a model of economic rationality. I now find myself very much in the same position. Parts of the capital market in the United States are, to put it mildly, in disastrous shape. One major part of our financial system, our

Savings and Loan Associations, has gone belly-up. The S & L debacle has cost the taxpayers hundreds of billions of dollars. That is a financial loss. But beyond that financial loss is a real loss: resources were misallocated. The government's losses are only a part of the total losses to society. If we take a middle ground in the estimate of the loss, \$300 billion, then it is as if almost one year's investment of the United States was completely squandered. It is hard to fathom mistakes of this magnitude.² While the S & L debacle is the most obvious problem with our financial markets, other parts of the US banking system are also not healthy.

This experience may put me in an advantageous position: for I can relate, on the basis of first hand experience, the consequences of ill functioning capital markets, and some of the causes.

I.

The Functions of the Capital Market

To help frame the discussion, I need to spend a few minutes reviewing the central functions of capital markets. These have been variously described as³

1. Transferring resources (capital) from those who have it (savers) to those who can make use of it (borrowers, or investors): in any capitalist economy, there

²This may overestimate the true social loss. Much of the loss is in real estate, and some of these expenditures were for the purchase of land. The banks' borrowers (and thus, with default, the bank) made speculative mistakes. They overpaid for the land. But these are pure transfer payments. Of course, these transfer payments affect the level of real savings of the economy, and thus have a deleterious effect on the economy's growth path.

³For a more extensive discussion of these various functions see, e.g. Stiglitz [1985], Greenwald and Stiglitz [1991], Stiglitz and Weiss [1991], Fama [1980], and the references cited in these papers.

is never a perfect coincidence between those who have funds and those who can make use of those funds.

2. Agglomerating capital: many projects require more capital than that of any one (or any small set of) savers(s).
3. Selecting projects: there are always more individuals who claim that they have good uses for resources than there are funds available.
4. Monitoring: ensuring that funds are used in the way promised.
5. Enforcing contracts: making sure that those who have borrowed repay the funds.
6. Transferring, sharing, and pooling risks: capital markets not only raise funds, but the rules which determine repayment determine who bears what risks.
7. Diversification: By pooling a large number of investment projects together, the total risk is reduced.

In addition, one of the central financial institutions, the banking system, is involved in a further function: recording transactions, or more generally running the medium of exchange.

In this description, capital markets not only are engaged in intertemporal trade, but also in risk. The two are inexorably linked together. That is partly because intertemporal trades involve dollars today for promises of dollars in the future, and there is almost always the chance that those promises will not be fulfilled. Thus, even if we would like to separate the two, we cannot. As a practical matter, in all capital markets, the two are combined.

The various functions I have described are linked together, but in ways which are not inevitable. For instance, banks link together the transactions

"This can be viewed (like some of the other functions) as "economizing on transactions costs, including information costs." Individuals can diversify without using financial intermediaries, but at greater costs.

functions and the functions of selecting and monitoring. With modern technologies, the transactions function can easily be separated. In cash management accounts, or CMAs, (run by the various brokerage houses in the United States), money is transferred into and out of "banks" instantaneously. The brokerage house's bank performs the transactions function, but no balances are kept, and accordingly no loan function (such as selecting and monitoring projects) is performed.

Some investment banks perform selection functions; they certify, in effect, bond or equity issues; but they play a very limited role in subsequently monitoring the borrower.

Today, mutual funds provide risk diversification services, with little attention to many of the other services of capital markets.

The array of financial institutions recognizes the advantages that come from specialization, as well as the possibilities of economies of scope. Thus, one of the traditional arguments for the interlinking of the medium of exchange function of banks and their loan functions was that in the process of mediating transactions, they acquired considerable information which might be of value in loan assessment and monitoring. This argument still has considerable validity, though the presence of a large number of alternatives for processing transactions vitiates some of the information content; observing a small fraction of the transactions of a potential borrower may have little if any information value.

Some of the interlinkages among functions arise from particular characteristics of information: judgments about whether a particular loan candidate is worthy have a lot more credibility when the persons or organizations making the judgments are willing to put up money, than when they are only willing

to make a recommendation. Monitoring is enhanced when there is a likelihood that the borrower will be returning to the lender for additional funds.

At the same time, it is important to bear in mind the distinctions among the various financial institutions and the roles they play. Thus, while the capital market as a whole raises and allocates funds, much of the activity in bond and stock markets involves trading existing assets. The stock market in particular is a relatively unimportant source of funds in the United States and the U.K.—two of the countries with the most developed equity markets.⁵ New firms typically raise their capital through venture capital firms, and established firms finance themselves through retained earnings, resorting to bank loans and debt if they should have to have outside funding. Though the liquidity-- provided by the stock market to shareowners may affect the attractiveness of firm's reinvesting its retained earning, the equity market itself does not exercise a primary role in raising and allocating investment funds.

The Distinctive Aspects of Capital Markets and the Role of Government

What are the distinctive aspects of capital markets that result in government regulation in almost all countries? Capital markets are different from ordinary markets, which involve the contemporaneous trade of commodities. As we have noted, what is exchanged is money today for a (often vague) promise of money in the future. This distinction has played an important role in explaining why capital markets cannot be, and are not run as, conventional

⁵See Mayer [1989].

auction markets, and why as a result there may be credit (and equity) rationing.⁶ It also explains some of the important roles that financial institutions perform, described in the previous section, such as monitoring and selecting: in conventional markets, there is no need to select; the item goes to the highest bidder.

II.

Primary Roles of Government

We can begin our analysis of the role of the government with an examination of the primary roles that government has already assumed. There are four distinct roles.

1. Consumer protection. The government is concerned that investors not be deceived. Thus, if a bank promises to repay a certain amount upon demand, the government wants it to be likely that it will repay that amount. There is a public good — information — which merits government intervention: information about the financial position of the firm is a public good.⁷ Of course, there are private incentives for disclosure (at least by the better firms)⁸; and in many areas, private rating agencies, such as Best for insurance, Moody's and Standard and Poor's for bonds, and Dun and Bradstreet for other investments, do

⁶See Stiglitz [1988a and b], Stiglitz and Weiss [1981], Greenwald, Stiglitz and Weiss [1984], and Myers and Majluf [1984].

⁷In addition, there may be an economy of scope between the enforcement of fraud laws and this kind of regulation. It is easier to enforce fraud if there are clear (and compulsory) standards of disclosure.

⁸See, e.g. Stiglitz [1975] or Grossman [1981].

play a role. The question is whether they are adequate; most governments have decided that they are not.

Government attempts to protect consumers have taken four forms⁹: (a) By ensuring the solvency of financial institutions¹⁰, governments make it more likely that financial institutions keep the promises they have made (e.g. banks will return the capital of depositors upon demand, insurers will pay the promised benefits when the insured against accident occurs). (b) Deposit insurance and government run guaranty funds protect consumers in the event of insolvency. (c) Disclosure laws make it more likely that investors know what they are getting when they make an investment¹¹. (d) The market is regulated in such a way as to ensure that certain individuals (insiders) do not take advantage of others. In the United States, there are a variety of such regulations, from those prohibiting inside trading to those that regulate the operation of the specialists (market makers) to those that attempt to prohibit unsavory practices, like cornering a market.

The government's interest in consumer protection in this area goes beyond looking after the interests of investors. It is concerned that without such protection, capital markets might not work effectively. If investors believe that the stock market is not fair, then they will be not be willing to invest their money; the market will be thin, and firms may have greater trouble raising capital. Episodes when investors have been cheated—from the South Sea Bubbles of the eighteenth century on—have been followed by a drying up of equity

⁹Beyond fraud laws, which prohibit outright deception.

¹⁰We will discuss below how the government attempts to do this.

¹¹In the United States, there are laws intended to make sure that borrowers know the true rate of interest they pay on loans, and that purchasers of equity know the true risks which they are undertaking in making an investment.

markets. Honest firms trying to raise capital are hurt by the potential presence of scoundrels: there is an externality. Government policies, in protecting investors, are thus aimed at making capital markets function better.

2. Government enhancing the solvency of banks. The United States has periodically been plagued with bank runs, perhaps more frequently than have other countries. There are three sets of instruments that the government has employed to enhance the solvency of banks.¹²

(i) Insurance. Government insurance for depositors was one way of trying to restore confidence in banks, and thus prevent bank runs. The government has undertaken this insurance role for two different reasons. One is to enhance the viability of the banking institutions, by increasing consumer confidence, making runs less likely. In this role, the insurance reduces the likelihood of illiquidity causing a bank default of a basically solvent firm. Here, the question is whether the other mechanisms (to be described below) suffice; whether there is much value added by government insurance. The second role is consumer protection. Today, it is hard in principle to see a justification for the latter role, as individuals can put their money in money market funds, investing in Treasury bills, for which there is no default risk (apart from that which might arise as a result of fraud.)

Given that the government does provide insurance, the government, like any other insurer, has a vested interest in making sure that the insured against event does not occur—that is, the government in its capacity as insurer, has a

¹²The government takes a less active role in ensuring the solvency of most other financial institutions, with the possible exception of insurance. Insurance firms are highly regulated, and the government in most states has established a guaranty fund, to protect those who purchase insurance against the consequences of insolvency of insurance firms.

vital interest in insuring the solvency of those that it has insured. This provides one (but only one) of the rationale for government intervention.

(ii) The Lender of Last Resort. Another mechanism for preventing bank runs was provided with the establishment of the Federal Reserve, a lender of last resort, ensuring that banks could obtain funds if they had a short run liquidity problem. With this assurance, it was hoped, bank runs would be less likely. Obviously, this does not resolve problems where the bank is truly insolvent; its only intent is to prevent short run liquidity problems from bringing down a bank.

(iii) Regulations. A variety of regulations are designed to prevent banks from becoming insolvent. Such regulations are (or should) be based on the following principles. (a) Monitoring banks is costly and necessarily imperfect. (b) Accordingly, the regulations must be designed to (i) make it more likely that those in control of banks make the kinds of decisions which enhance the solvency of the institution; and (ii) make it possible to detect problems before the bank is actually insolvent. The regulations must further be based on the recognition that there are important asymmetries of information between the bank and the bank regulators, that the "books" of the bank are largely in the control of the bank, and that accordingly, the information presented to the bank regulators may quite possibly be "distorted." Thus, banks are in a position to sell undervalued assets, but keep overvalued assets on their books at book value. When banks systematically engage in this practice, then "book" value will systematically overestimate true value.¹³

The first objective, making it more likely that those in control of banks take solvency-enhancing decisions, is aided by requirements that the bank have

¹³Tax considerations may limit the extent to which they do this. But when a bank is in difficulties, regulatory considerations are likely to dominate tax considerations.

substantial net worth—so that it has much to lose in the event of losses—and by restricting the kinds of loans and investments which the bank may make, e.g. insider lending restrictions as well as restrictions on purchases of junk bonds.

3. Government attempting to enhance macroeconomic stability. One of the reasons that the government has been concerned about bank runs is that the collapse of the banking system has severe macroeconomic consequences. Banks (and other financial institutions) are a repository of specialized information concerning their borrowers; when these banks fail, there is a concomitant decline in the economy's information-organizational capital. This translates into a decrease in loan availability. Note that this would not be a problem if capital markets were just auction markets. But they are not. A decrease in information impairs not only the efficiency with which funds get allocated; it may also lead to more extensive credit rationing, so that the effective cost of capital is greatly increased.

One of the functions that banks (and other financial institutions) are engaged in is certifying who is likely to repay loans, i.e. whose promises to pay should be believed. If too many people are so certified—if there are too many who can get funds, and they decide to exercise that option—then the demand for goods can easily exceed the supply. Since the price system (interest rate) is not functioning to clear the capital market, there is, within the market system, no automatic market clearing mechanism. This provides an important role for a central bank.

4. Competition policy. In the United States, perhaps more than in other countries, there is (or least has been) a concern that without government

intervention, the banks would be able to exercise undue concentration of economic power. Many of the restrictions imposed on banks, such as those relating to interstate banking, and those relating to what activities banks can engage in) are intended to limit their ability to exercise economic power.

Rationale for Government Intervention

This, perhaps by now familiar, litany of the roles that government regulation play in financial markets is one way we could approach the problem of government regulation. The other way is to ask if there is any reason to believe that free and unfettered capital markets result in efficient resource allocations. Until fifteen years ago, there was a quick and easy answer: Adam Smith's invisible hand theorem said that competitive markets would ensure efficient resource allocations. But research over the past decade has analyzed in depth the functioning of the capital market. What makes capital markets interesting and important is that information is imperfect. With imperfect information markets are, in general, not constrained Pareto efficient.¹⁴ There is no presumption in favor of unfettered markets.

This is not the occasion to review all the reasons why this might be so. Let me just briefly mention one: much of the return in capital markets consists of rent seeking. Knowing Exxon has made a major oil discovery a minute before anyone else does may make you a fortune buying Exxon stock; but it does not increase the efficiency with which society's resources get allocated.¹⁵ Much of the innovation in the financial sector entails recording transactions more

¹⁴See, e.g. Greenwald and Stiglitz [1986, 1988].

¹⁵See Hirschleifer [1971].

quickly; but is society really that much better off as a result? Someone might get the interest which might otherwise have accrued to some one else, but have more goods been produced? Or have they been allocated more efficiently?¹⁶ Suppose hundred dollar bills fell at all of our feet, one by each of us. Suppose we were busily engaged in some productive activity. If we could agree, it would pay all of us to wait until we finished the activity, and then each bent down to pick up the bills at his foot. But this is not a Nash equilibrium: if others were working, it would pay each of us to bend down to try to pick up as many dollar bills as we could. Of course, when we all do it, we each get our own hundred dollar bill; we have lost the production we would otherwise have had; we are all worse off as a result.¹⁷

In short, there is no a priori basis for arguing the government should not intervene in the market; and there seem strong arguments for government intervention.

In any case, some government intervention is likely. The question then is what kinds of financial institutions to establish, and what role should government play.

¹⁶See Stiglitz and Weiss [1991] for a formal model of this.

¹⁷I am indebted to Larry Summers for this example.

III.

PERSPECTIVES FOR THE NEWLY EMERGING DEMOCRACIES: Issues of Transition

Most of the problems discussed in the previous section are generic: they arise in virtually any economy, though with more force in some than in others. The problems take on a particular color within the newly emerging democracies of Eastern Europe, and it is upon these distinctive features that I want to concentrate my attention.

We can distinguish two distinctive sets of issues—those that relate to the form of the financial institutions which will eventually emerge in these countries, and those that relate to the particular problems associated with the transition from their current situation to a market economy. Of course, the two problems are in a sense inseparable: views about the ultimate destination impinge on how some of the short run problems ought to be addressed, and answers provided to the short run transition problems will almost undoubtedly have a major impact on the ultimate destination. Indeed, earlier in my talk I urged an awareness of this interaction: decisions made in the short run may not easily be reversed.

Given the focus of concern of this conference, I shall begin my remarks by centering attention in the transition problems, noting in particular the instances where how these are resolved is critically dependent on the conception of the eventual structure of the financial system.

There are five related central problems facing these economies in the process of transition. (i) One of these has been well recognized: how to establish hard budget constraints. The importance of the other four has only gradually been recognized: (ii) Historically, the banks and other so-called

financial institutions did not perform any of the central functions (other than mediating transactions) that we associate with financial institutions. In effect, completely new institutions have to be created; yet in most of the countries, rather than creating new institutions, there has been an attempt to adapt old institutions. The extent to which their historical institutional legacy will impair them remains to be seen: will the old modes of thinking impede their ability to recognize their new economic functions? At the very least, a process of re-education is required. (iii) Under the old regime, not only did banks perform the same role (e.g. screening loan applicants), but those taking out loans did not view them in the same way: After all, given that the government owned by the bank and owned the enterprise, it was like the left pocket owing the right pocket money. Both sides of the transaction looked upon this as simply an accounting exercise. This raises important questions of what are we to make of the inherited loan portfolios of the financial institutions? How we treat these inherited debts has obvious consequences for, and is obviously affected by, the process of privatization. (iv) The former socialist economies inherit a situation in which the state had an economic monopoly. Moreover, the state did not use competition as an instrument of policy. On the contrary, there were state monopolies in many industries (including in the financial sector.) Developing effective competition may prove to be a difficult task. (v) The relationship between finance and corporate control has increasingly drawn the attention of economists (see, e.g. Stiglitz [1985].) The special problems which are likely to arise in the case of those socialist economies which decide to privatize by means of schemes which result in a wide distribution of equity ownership have implications for the role and design of financial institutions.

We elaborate on the first three issues in the discussion below, leaving the last two to the next part, in which we focus on the ultimate shape of the financial system.

Underlying much of the discussion of the design of financial systems for the newly emerging democracies is the extent to which reliance should be placed on the reform and re-organization of existing institutions, and the extent to which reliance should be place on the creation of new institutions; and the extent to which a clean slate should be declared, with old debts and credits, created under a very different economic regime, being wiped out. Many of the issues that form the basis of this debate turn on politics and expectations, and bring us beyond the scope of economics. Still, there are basic economic issues that are relevant to this discussion, and it is upon these economic issues that we focus our attention, when we touch upon the choice of reformation of existing institutions versus the creation of new ones. Much of our discussion, however, will center around the reform of existing institutions rather than the distinctive problems of creating new institutions.

Soft budget constraints, bank solvency, selection processes
and inherited assets and liabilities

Perhaps the first problem one encounters in the reform of current financial institutions is that of their solvency. Many of the financial institutions have been run with soft budget constraints: deficits have been made up by the government. Soft budget constraints within the financial sector can have disastrous effects for the entire economy. Soft budget constraints are like a disease: they can be highly contagious. If the banks face soft budget constraints, they will not impose discipline upon their borrowers. If a borrower

has a zero or negative net worth, he may not care if he makes a loss: even if the government will not make up the difference, he may be able to borrow, to keep himself operating.

There is a more direct mechanism by which the disease of soft budget constraints is spread: firms are constantly extending trade credit to suppliers and customers. If some firms are not on a tight leash, they may not put their suppliers and customers on a tight leash. If there is a widespread belief that the State stands behind State firms, and will honor their debts, then any State firm is in the position of being able to create credit.

Hardening the budget constraint through Privatization

The difficult question is, how best to harden the budget constraint. There are no easy answers. Here, I want to suggest some problems with some of the often proposed solutions. The seeming simplest solution is privatization. Once a firm is in the private sector, it has no more "entitlement" to the public purse. It must sink or swim.

Problems of valuation

The problems of privatization have been widely discussed. Here, I want to focus on some of those problems which arise acutely in the privatization of the financial sector. Assume, for the moment, that the government were to decide to sell the financial sector in open competition. One central problem is that of valuing the assets of financial institutions. The risks associated with valuing those assets imply that, with risk averse bidders, the State is likely to get considerably less than the actuarially fair value. This, of course, is true for all privatizations. But the risks are, in a fundamental sense, different from

the risks associated with privatizing industrial firms. One of the central aspects of the risks associated with valuing a banks' assets is how, in the process of privatization of the "firms" that owe the bank money, the liabilities of those firms are to be treated. These are issues which, at this juncture, have not been resolved. Thus, the central valuation risk is a political risk, and it makes little sense for the government to transfer—at a cost—that risk to the private sector.

Moreover, the consequences of valuation errors are likely to be particularly severe. On the one hand, if the bidders overestimate the value of their assets, the financial institutions will be undercapitalized. Undercapitalized financial institutions have strong incentives to undertake undue risks. This is the familiar moral hazard problem, the consequences of which were all too clear in the case of the S & L debacle in the United States, as the near bankrupt firms gambled on their resurrection. Moreover, if such undercapitalization is widespread, then the likelihood of a government bail-out becomes very high, and the financial institutions will know this, and act accordingly: privatization will not, after all, harden budget constraints.

If the bidders underestimate the value of the assets, there will be charges of a government give-away. It may be hard for governments to resist the temptation to recapture these profits, e.g. by a special tax on the industry.

Insolvency of financial institutions

In either case, of a significant under or over-valuation of the assets, the success or failure of the financial institution will not convey much information—other than about the luck (or lack of it) of the bidders, or their skill (or lack of it) in predicting political winds. If a bank appears to be solvent, it

may not be because it is making good lending decisions. It may only be because its assets were undervalued.

By the same token, the government faces severe problems in deciding what to do with a bank facing a liquidity crisis. First, it must ascertain whether it is insolvent. Determining insolvency gets us back to the basic problems of asset valuation discussed earlier. The value of its loan portfolio depends to a large measure on government policies: will the government honor the loans taken out by state enterprises? Will it insist on those purchasing state enterprises "honoring" these debts? And even if it is ascertained that a bank is insolvent should one presume that it is incompetent, and therefore be shut down?

Not necessarily, if there have been drastic changes in economic circumstances, which could not reasonably have been anticipated. But this is precisely the position in which many Eastern European institutions find themselves. Moreover, the grounds for granting loans by state run banks may have had little to do with standard commercial principles. Banks under socialism do not perform the central functions of screening and monitoring that they do under capitalism.

Assume one concludes that the insolvency is not a mark of incompetence: what then? There is (perhaps) valuable organizational capital¹⁶, which would be lost if the bank were dissolved. One needs a once-and-for all capital infusion. Without some method of ensuring that such a capital infusion would not be repeated, again incentives would be distorted.

¹⁶My earlier remarks suggested that there may be "negative" organizational capital: the outmoded ways of thinking associated with banking under socialism may tinge the banks in the new economic situation, and thus impair their ability to perform their new, different, and more important economic role.

Public distribution of shares: a negative capital levy?

The same problems would arise—even more strongly¹⁹ — if the banks were privatized, but the shares distributed publicly. This is, in effect, a negative lump sum grant, or a negative capital levy. Traditional tax theory has argued for the desirability of capital levies, were it not for the distortionary consequences arising from the expectation that they might be repeated. Proponents of these negative capital levies argue that the gains in managerial incentives from privatization more than outweigh the subsequent costs arising from the distortionary taxation which will be necessary to raise the requisite revenue. But a partial privatization, with the government retaining a substantial fraction of the shares, would presumably do as well: in most large private corporations in the United States, managerial pay is only weakly related to managers' contributions to firm performance.²⁰

To mitigate the negative capital levy effect, the government might, alternatively, treat the current assets of a non-financial firm being privatized as debt of the firm to the government. But then the government itself would be involved in the difficult question of valuation, with all the untoward consequences of misvaluation which we have previously noted.

¹⁹Because, unlike the case where the bank is sold, there has been no outside assessment of the value of assets and liability, as unreliable as those assessments might be, and no infusion of additional equity from the outside, which one might normally be expected to occur in the event of a privatization of a bank.

²⁰And again, the difficulties of valuing the financial institution's existing assets make it difficult to ascertain whether the financial institution is doing a "good" job.

The Timing of Privatization of Financial Institutions

In short, the potential viability of any newly privatized bank may depend as much on its competence in valuing the old assets, or on luck, as prices and market values change in hard to anticipate ways—as on the competency of the institution in performing its on-going roles (described earlier in this paper.) Particularly during the early stages of the transition, where government laws, regulations, and policies affecting the private sector are not clear, market values may change in hard to predict ways. For instance, the government might decide that the high debt of some firms represents an impediment to their ongoing operation, and either repudiate that debt or assume that debt as its own obligation. These alternatives have obviously drastically different obligations for the holders of this debt paper.²¹

In the days of socialism, financial structure made no difference (here at last was a domain in which the Modigliani-Miller theorem was correct, though for quite different reasons: all obligations were simply obligations of one part of the government to another.²²) Firms produced what they were told to produce; finance simply accommodated these "orders."²³ In market economies, financial structure makes a great deal of difference.²⁴ Again, there is no incentive or sorting reason to impose the inherited financial structure of firms upon the

²¹An important issue in the transition process is how to deal, more broadly, with these inherited obligations. Inflation is obviously one way of reducing their importance, but this obviously has its own disadvantages. A fuller discussion of this issue would take us beyond the scope of this paper.

²²This undoubtedly over-simplifies the situation, particularly in those countries, like Hungary and Yugoslavia, where firms had some autonomy, where there bankruptcy laws, and where the government did not as a consequence serve as the ultimate guarantor of all loans.

²³For a more extensive discussion of this, see McKinnon [1991].

²⁴See, e.g. Stiglitz [1988a].

ongoing operations of the firm. Some kind of recapitalization is required. While privatization represents one form such recapitalization can take, government assumption of debt (as in the restructuring of the S & L's in the United States) and debt for equity swaps (as in the restructuring of some third world debt) may represent interim measures to be taken as the government re-examines some of the more fundamental issues associated with privatization. But these recapitalizations, as desirable as they may be, can have profound effects on the outstanding liabilities of these firms to the financial institutions. There seems a case for resolving these uncertainties before proceeding with the privatization of financial institutions. If privatization is postponed, some alternative interim method of "hardening" budget constraints may be required. Professor McKinnon, in his paper, provides one thoughtful possibility.

Leaving for the moment the question of the timing of privatization of the financial institutions, there are some important caveats to be borne in mind in the design of what might be viewed as the "privatization package."

Other issues in the hardening of budget constraints

There are obvious macro as well as micro advantages of enforcing tough budget constraints. The excessive expansion of credit can clearly lead to inflationary pressures. I want to put a word of caution against hardening the budget constraint too rapidly, or perhaps I should say, in the wrong way.

Hard budget constraints and the selection mechanism
in the process of transition.

Tough budget constraints have obvious incentive effects—provided they can be met. But beyond their incentive effects, they are important as selection

mechanisms. Those who cannot meet the market test are weeded out. This selection mechanism only makes sense if market prices are right. But in the transition period, market prices are likely to deviate markedly from their longer run equilibrium values. Moreover, in assessing viability, some value must be attached to the capital which is used. But when the machines that have been installed are inefficient and of low quality, how are we to evaluate them? There is not much of a used market. If we undervalue them, it may be too easy to meet the market test. If we overvalue them, it may be impossible for the firm to survive.

Credit constraints and aggregate supply

Secondly, the standard macro model focuses on the effect of monetary (credit) constraints on aggregate demand. But such constraints have effects on aggregate supply. If firms cannot get sufficient working capital, then production will be cut back.²⁵ If interest rates are raised sharply, and there has not been a recapitalization, high debt firms may be thrown into bankruptcy. But these problems have nothing to do with their current operating efficiency, only with an inherited financial structure.²⁶ If the reduction in aggregate supply exceeds that of aggregate demand, the monetary (credit) constraints can actually be inflationary. More broadly, it is important that credit be cut off

²⁵See Greenwald and Stiglitz [1990] for a model which analyzes simultaneously the effect of capital market conditions on aggregate demand and supply. Frankel and Calvo [1991] have emphasized the role of these supply effects in the transition process.

²⁶While there is some debate about the significance of the costs of bankruptcy, in the process of transition, when all of society's resources are being reorganized, the disruption in the use of resources following a bankruptcy may be particularly costly. The external costs of bankruptcy are especially large when there is only one supplier of a good, as was often the case under central planning.

to those for which the return is lowest. But in the transition process, that is difficult to ascertain.

Macro-economic control mechanisms

There are problems with controlling both the allocation of credit, and its total volume. When there is a single bank, the volume of credit is, in principle, easy to control. But a central part of establishing a market economy is having at least a few competing banks and other financial institutions. In the United States and many other capitalist economies, the government relies on indirect control mechanisms for controlling the quantity of credit: open market operations, discount rates, and reserve requirements. Even in the United States, the relationship between these instruments and the volume of credit becomes tenuous, when the economy faces considerable uncertainty, as in the event of a downturn. In newly established financial systems, there is likely to be even greater uncertainty about these relationships, and thus indirect control mechanisms may be viewed as an excessively risky way of controlling the volume of credit. On the other hand, the Central Bank may not be in a position to allocate credit targets efficiently among the various banks. One suggestion is "marketable quantity constraints." The Central Bank would control the quantity of credit, either auctioning off the right to issue loans or granting the rights to various banks, with the proviso that banks could trade the rights among themselves. Such marketable quantity constraints combine the certainty of quantity targets with the allocational efficiency of market mechanisms.²⁷

²⁷Such marketable quantity constraints have been introduced in the United States for the control of certain kinds of pollution. Weitzman provides an analysis of the advantages of the use of quantities versus prices as control mechanisms in the presence of uncertain benefit and cost functions. Such an analysis can be extended to the problem under consideration here.

IV.

PERSPECTIVES FOR THE NEWLY EMERGING DEMOCRACIES:

The Ultimate Shape of the Financial System

There are some basic issues concerning the design of the financial system which must be faced as part of the transition, but which are as much issues of the ultimate shape of the financial system. We divide our discussion into three sections. The first deals with the role of competition, the second with the set of regulations that are concerned with the solvency/liquidity of the banking system, and the third which focuses on issues of corporate control.

Banks and competition.

Let me now turn to the question of banks and competition. There are two separate, but related issues: competition among banks, and banking practices which affect competition among firms. The United States has clearly been worried about the possible deleterious effects of banking practices which limit competition among firms. Recent reforms in the banking system have encouraged more competition within the banking system--far more competition than in other countries--and there are proposals to dismantle some of the regulations which were intended to limit the economic power of banks.

The problem of establishing viable competition in the Newly Emerging Democracies is a bone of some contention. There are some who believe that allowing foreign competition is all that is required. Others see a variety of barriers to entry, of a kind that have been well documented within capitalist

The kinds of criticisms raised against the use of the price system for the allocation of credit (Stiglitz [1988b]) can be raised here, for the use of the price system in allocating the rights to allocate credit among financial institutions.

economies, resulting in at best imperfect competition. I am inclined to the latter view. Adam Smith had it right when he described the natural inclination of businessmen as attempting to restrict competition: "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."²⁸ These tendencies may be all the stronger among individuals who have formerly worked closely together, as seems often to be the case when large state enterprises are divided into competing firms. Anecdotes of firms getting together to stabilize the market and to prevent disorderly competition do not prove the point, but they at least alert us to the existence of a problem.²⁹ The fact that there has not, in the past, been competition, that those within an industry have been encouraged to cooperate rather than compete, and have developed a nexus of social relationships which promote such cooperative (non-competitive) behavior make it all the more difficult to make competition effective.

Banks can, and have, served the function of limiting competition in product markets. They are in an ideal position for coordinating decision making. Moreover, it is even in the bank's narrow interest as a lender to limit competition: the fiercer the competition, the more likely the less efficient firms within the market will go bankrupt, and thus the more likely that some loans will not be repaid.

²⁸Wealth of Nations, I.x.c.27.

²⁹On the other hand, the fact that firms make profits does not prove that competition is limited, as some critics of markets within the socialist and former socialist economies seem to suggest. There are profits to be had from making markets work more efficiently, from supplying what is needed. Not all profits are monopoly profits.

While the vitality of capitalism does not depend on the existence of perfect competition in the textbook sense, a high level of competition is essential, to ensure both economic efficiency and that the fruits of that efficiency are passed on to consumers. Farmers will find little relief if instead of receiving low prices for their goods from the government, they receive low prices from monopsonist food processors. In either case, low prices will depress production and inhibit development of the agricultural sector.

There is a general presumption that competition among banks is no less desirable than competition in other sectors of the economy. But while some competition among the banks is thus desirable, excess competition may have its problems. Banks, perhaps more than other institutions, depend on their reputation. Reputation is an asset worth preserving—provided that there is an economic return. But for there to be an economic return, competition has to be limited. The limitation may come from natural economic forces—establishing a reputation may act as a barrier to entry.³⁰ (Though this argument holds, to some extent, in many other markets, it holds with particular force in financial institutions, where what is being exchanged is dollars today for promises of dollars in the future. A buyer of a TV can see quickly what he is getting; if the TV wears out in two years, the producer will quickly lose his reputation. With financial markets, the promises are frequently much longer term.) It is worth noting that in the United States, one of the effects of deposit insurance was to reduce or eliminate this barrier to entry, facilitating entry and competition. But the resulting competition, and the ensuing reduction of reputation rents, encouraged banks to pursue short sighted policies which contributed to the S & L debacle and the current banking crisis.

³⁰See Eaton [1986], Shapiro [1983], Schmalensee [1982] or Stiglitz [1989].

There seems a real possibility of either excessive entry—driving rents to zero, and thus eliminating the incentives for maintaining a reputation—or of insufficient entry—leading to insufficient competition within the financial sector. Nor do we have any confidence in the government's ability to set the "right" level of entry. Out of this no clear prescription emerges, simply a word of caution: the financial sector needs to be carefully watched, for evidences of significant "errors" in either direction.

Regulations for a banking system

There is now widespread recognition (for the reasons given earlier) that even in the best run of capitalist economies, banks need to be regulated. Earlier, I discussed the general form and objectives of this regulation. To translate these into concrete proposals for the financial institutions of the newly emerging democracies would take me beyond the scope of this paper. But I would like to dwell on a couple of key issues.

Over the past decade, the United States has been engaged in a debate about the appropriate regulatory framework. That debate has served to isolate both the key issues, as well as the doctrinal positions which have been taken up in that debate. I am assuming no detailed familiarity with either the institutions or the policy debates, and I want to discuss only three issues—issues which each of the countries of Eastern Europe must eventually face.

(As an aside, the debate does illustrate the difficulty of changing the system: this should be a reminder of how important it is to get things right the first time.)

The Bush administration's proposed reform begins with a doctrinal belief in competition. If a market isn't working, it must be because of government

interference. The cure is immediate: reducing government restrictions will enhance competition, and make the market work better. In this case, there is a consensus that more capital is needed, as the net worth of banks has been drained by bad investment decisions. Thus, relaxing restrictions on those who can own banks (the barrier between manufacturing and banking firms) will enhance a flow of capital to banks and thus strengthen the banking system. In this view, increased net worth requirements will simply exacerbate the bank's problem, since many of them can hardly meet the current low requirements. Though some slight attention is focused on limiting deposit insurance—so that each individual can have only one \$100,000 account, there seems to be agreement that enforcing such a provision would be very costly; and besides, since in the case of Big Banks, the government has acted as if everyone is insured anyway, it is hard to see the relevance of this refinement of current law. Doctrinal beliefs can carry one a long way—especially when they conform closely with what the special interests want. But the belief in competition is no substitute for hard economic analysis. There is, as we have noted, no presumption that financial markets, without government intervention, work perfectly. We now take a closer look at the basic issues.

Capital requirements

The problems which have confronted the S & L's and the banking system illustrate how difficult it is to monitor problems, even in a relatively stable banking structure. There have been relatively few charges of corruption on the part of the regulator. Though this is not the intent of the current institutional structure, having three separate regulatory agencies involved in monitoring provides safeguards against that. The basic lesson I take away is

that if capital requirements are too low, problems are not detected until the bank is truly insolvent. Given the noise in the detection process, our present capital requirements are too low.

Low capital requirements also exacerbate the moral hazard problem. And since detection is difficult, firms continue to operate whose net worth is negligible, or even negative. Such firms have strong incentives to "gamble on resurrection." Economists' predictions of how rational firms would behave in such situations have, unfortunately, been borne out.

Deposit insurance Deposit insurance is, to a large extent, a red herring. With modern financial institutions, individuals do not need deposit insurance to protect them: in the United States, there are check writing accounts, backed by Treasury bills, which provide a perfectly safe medium of exchange for small depositors, the ones the deposit insurance is supposed to protect. While such institutions have not yet emerged in Eastern Europe, one should surely expect them to arise in short order.

Critics of deposit insurance claim that under the current system, deposit insurance causes a major problem because it removes any incentive for depositors to look towards the solvency of the institution in which they are depositing their money. Indeed, this sets up a process of Gresham's Law: High risk banks, which can garner higher expected returns, drive out low risk banks. In effect, the value of the insurance that the government is providing is increased. Individuals take advantage of the greater insurance "gift" from the government by depositing in high risk banks.

I am, however, unpersuaded by the argument that individuals can monitor the banks—and would do so in the absence of deposit insurance. The fact is that

monitoring is a public good, individuals do not have access to the relevant information, and they are not in as competent position to judge as regulators should be. Rating services go only a little way to fill the gap. They certainly have not performed stellarly in the current crisis.

If the government were to increase capital requirements³¹, then the risk borne through deposit insurance by the government would be limited. The enhanced safety, or perception of safety, would probably be worth the slight cost.

Restrictions on investments

Banking institutions have traditionally faced restrictions on how they can invest their funds. Advocates of deregulation have focused on the increased profit opportunities that might result from deregulation. But allowing banks to enter into other financial activities (selling securities) would only significantly enhance profit opportunities if one believed that there were significant economies of scope, or one believed that those who had come to specialize in providing these services were less competent than those who had come to specialize in providing banking services. It is hard to see a compelling case for either of these arguments.

The question that needs to be posed, of course, is whether these regulations serve any useful purpose. Given the special position of banks within the economy, the scope for moral hazard problems to arise (evidenced so clearly within the United States in the last decade) and the limited ability of government to monitor banks, there is much to be said for limiting the kinds of investments. There is a trade: the government provides deposit insurance, and

³¹The capital requirements could be met either by equity or be uninsured debt. For a fuller discussion of this proposal, see Stiglitz (1991).

any insurance firm has the right to take actions which limits their risk exposure. If a financial institution does not want to be subjected to these regulations, it should be able to opt out; but then it should not be able to avail itself of the special opportunities afforded banks, such as deposit insurance.

Similarly, consider the issue of restrictions on who can own a bank. Originally, the wall between banks and other enterprises was placed to enhance competition and to reduce the scope for conflicts of interest. On the one hand, one could argue that with the enhanced international market in which most firms operate, concerns about competition have diminished. On the other hand, one could ask what is to be gained from reducing the barrier. The concern has been raised that American banks need more capital. But if individuals, pension funds, and other investors are not willing to put up their money to provide banks with more capital, why should we have confidence that those institutions which they own—the producing corporations—should do so? If they are a bad investment for individuals, they are a bad investment for corporations. There is, of course, one good reason: firms that could not get an honest loan from an unrelated third party might be able to get a loan from a bank of which they are a major shareholder. In short, this kind of proposal puts the long run solvency of the banking system into further jeopardy.³²

³²There is another argument, that the restriction on ownership is really a restriction not on the flow of capital but on the "market for control." If a bank is performing badly, only new entrepreneurs or other banks can take it over. This is, in fact, a large market, and there is little evidence that restricting control in this way has had any adverse effect. Moreover, there is considerable evidence that the market for control is not efficiency-enhancing—on average, there is little if any gain in market value for the firm taking over. Why should someone who has managed an oil company be particularly good at managing a bank? In practice, what happens is that the bank managers stay on. There is no real change in management.

In summary, my own view is that the most important element in bank regulation are capital requirements. If these are set at a sufficiently high level, then other issues become less important: the provision of deposit insurance becomes less important, with the potential gains exceeding the slight costs. If the government does provide insurance, it makes sense that there be regulations—such as those relating to interest rates that can be paid depositors and the investments into which banks can put their funds—designed to limit the government's risk. And given the limited ability of government (and depositors) to monitor banks, ownership restrictions, limiting potential conflicts of interest and the abuse of banks' fiduciary responsibilities, seem desirable. But on this last point, I have less confidence, for reasons for which I shall now turn.

Banks and Corporate Control: Two Views

The view that I have just expressed—the desirability of maintaining strong walls between the financial and production sectors of the economy runs counter to what many observers see as the very successful models of financial structure of Japan and Germany. These provide very viable alternative models for designing financial systems, models which are particularly attractive in the context of "people's capitalism" to which some of the emerging democracies may be evolving. In my view, there is no single viable financial structure but, on the other hand there are many non-viable financial structures. The United States has one which has certain marked problems, and it seems to be embarking upon reforms in that system that will exacerbate those problems.

The Japanese financial system is usually characterized as involving production groups, in each of which there is a bank at the center. These banks

are closely involved with production firms. When Mazda had trouble, its bank stepped in, changed management, and successfully turned the company around. There is competition across these groups, cooperation within the groups.

The Japanese model has received considerable attention as resolving a problem plaguing American managerial capitalism. With widely diversified shares, managers have considerable autonomy. Good management is a public good: all shareholders benefit if the firm is run better. No shareholder can be excluded from these benefits. Each shareholder thus has an inadequate incentive to monitor the firm. Indeed, there are great barriers to small shareholders doing an effective job. The alleged control mechanisms work most imperfectly—management is seldom replaced through the voting mechanism, and there are fundamental problems with the take-over mechanism.³³

While banks nominally do not have control, they may actually exercise more effective control. They have a credible threat of withdrawing credit; information problems mean that credit markets are inherently imperfect, and when one firm withdraws credit, others will not normally rush in³⁴. Moreover, credit is normally more concentrated than equity (there is normally a lead bank, the number of banks in a lending syndicate is limited, and they have a variety of reciprocal relationships which help reduce the importance of free rider problems). Thus, banks have both the incentives and the means to exercise control.³⁵

³³For discussions of these problems, see Stiglitz [1972, 1982, 1985], Grossman and Hart [1980].

³⁴For a theoretical analysis of why this is so, and of the incentive effects of credit termination, see Stiglitz and Weiss [1983].

³⁵See Berle and Means [1933] and Stiglitz [1985]. Part of the reason for the concentration of debt is that, given the limited extent of risk, risk diversification is less important than in the case of equity.

In this perspective, the appropriate way to view the firm is as a multiple principal-agent problem—the various principals being all those who provide capital to the firm as well as the workers (essentially, anyone who would be adversely affected by, say, the bankruptcy of the firm.) In this view, the manager is the "agent" of all these principals. While the bank may not induce the firm to take actions which maximize the welfare of these other groups—ensuring that there is a relatively low risk of bankruptcy may not maximize expected returns to shareholders—the control which they exercise does confer external benefits on other groups, at least in ensuring the solvency of the firm. When the bank also is a shareholder, one could argue that the bank is more likely to pursue actions which enhance the overall return to capital. This is one of the essential advantages of the "Japanese model." There is a single bank which has the incentive to exercise the critical monitoring function; and because it also has an ownership stake, it does this in a way which reflects both the interests of lenders and owners of equity.

One might imagine that if the shares of the large enterprises within the newly emerging democracies were widely distributed, there would be real problems of managerial control. The worst kinds of abuses—the kind that have been documented in the case of RJR-Nabisco—could become prevalent. The Japanese system may limit these—at the expense of an agglomeration of enormous amounts of corporate power. Some of these abuses will be limited by ensuring that there are several such groups, and that there will be competition among them. (Thus, one's view of the desirable financial structure may be affected by how effectively one believes antitrust laws will be enforced.) International competition may provide further discipline. Yet one cannot be blind to the possibility that the concentration of large amounts of capital under the control

of relatively few individuals (even if they do not "own" the capital) can be used to obtain political influence, possibly to restrict competition (though always, of course, in the name of some other more sacred principle.)

Perhaps a hybrid system—one in which there are holding companies, performing, in effect, managerial roles over those who are part of their group, and separate financial institutions would provide the needed checks and balances.³⁶ The financial institutions would provide an important role in monitoring the monitors; and at the same time, the separation would serve to limit somewhat the concentration of economic power.^{37 38}

In recent years within the United States, venture capital firms have played a vital role in providing finance, particularly to new high technology industries (especially in computers and bio-medical and related areas). There, the monitoring and selection functions are intimately interconnected with the provision of capital. Whether there is a greater potential scope for these firms, and whether variants of these firms could be adapted to the process of privatization, is not yet clear.

³⁶Some people envisage the holding companies as having only a role in the transition process. While eventually shares are widely held, they see a process of concentration, with eventually some ownership shares being sufficiently large to play an effective role in control. There is little evidence on the speed with which such concentration would occur, or indeed, whether it would eventually occur, in which case the holding companies would become a permanent part of the scene.

³⁷To some extent, designing financial institutions that "work well" with those of Western Europe may be as important as any of the factors we have listed, if the Eastern European countries want to be integrated quickly into Europe.

³⁸It is perhaps worth noting that the United States quite explicitly tried to restrict the extent to which one firm could own or control other firms (at least in related industries)—because of its concern over the resulting potential for collusive behavior. On the other hand, having firms own other firms (as seems to prevalent in Japan) may provide a more effective system of "peer monitoring." See Arnott and Stiglitz [1991] for a discussion of the role of peer monitoring in mitigating moral hazard problems.

Equity Markets

I have focused my attention primarily on banks, not on equity markets. The choice is deliberate. To a large extent, equity markets are an interesting and fun sideshow, but they are not at the heart of the action. Relatively little capital is raised in equity markets, even in the United States and the United Kingdom.³⁹ One cannot expect equity markets to play an important role in raising funds in the newly emerging democracies. Equity markets are also a sideshow in the allocation of capital. As my colleague Robert Hall once put it: The Wall Street Journal finally got it right, when they split the financial section from the business section. The two are only very loosely connected. Managers do not look to the stock market—to the views of the dentists in Peoria or the retired insurance salesmen in Florida—to determine whether another blast furnace should be built, or whether further exploration for oil should be undertaken. The stock price is relevant—they look to the effect on the stock market price. But it does not, and should not, drive their behavior. It simply provides too coarse information to direct investment decisions. And in the transition process of the Eastern European countries, it is even less likely that equity markets will play an important role in providing information which is of relevance for investment decisions.

On the other hand, if the stock market becomes important, instability in the stock market⁴⁰ can contribute to macro-economic instability, in ways which are by now familiar. The policy implications of this (e.g. for transactions

³⁹For a review of the data for recent years, see Mayer [1989]

⁴⁰Of the kind that can result from speculative bubbles.

taxes on the stock market) remain a subject of considerable debate. (See, e.g. Stiglitz [1989] and Summers and Summers [1989].)

While the stock market enhances liquidity, and the enhanced liquidity makes investment in equities much more desirable, the stockmarket is not an unmitigated blessing. There has been concern, for instance, that to the extent that managers do pay attention to stock market prices, it leads them to behave in an excessively short sighted manner (presumably because stock prices are excessively sensitive to short run returns.) Advocates of this view—a view which can be traced at least back to Keynes—look for ways to encourage long term investment in securities, perhaps using the tax system to discourage short term trading (e.g. a turnover tax.) Though this is not the occasion to enter into that debate (aspects of which turn around practical problems in implementing such a tax), it should be noted that there is little evidence that such taxes, which have been implemented in several countries, have had any adverse effects on market volatility or indeed on the ability of the market to perform any of the other functions which it performs.

Conclusions

Financial markets play a central role in any capitalist economy. The design of capital markets affects the ability of the economy to raise capital and to allocate it efficiently. Beyond that, the design of capital markets affects the efficiency of enterprises in all other sectors of the economy. Even if one has little confidence in the efficiency or effectiveness of the "market for corporate control," the monitoring function of financial institutions provides essential discipline on managers, a discipline function which is particularly important in economies in which shares are widely held.

While there are an array of financial structures found in different capitalist economies from which the newly emerging democracies can choose, it is not evident that any represent the "optimal" financial structure, or indeed, that any of them has fully adapted to the new technologies which have revolutionized the processing of information. In the case of some capitalist countries, the defects in the financial systems are all too apparent. The newly emerging democracies have ahead of them a delicate balancing act: Once they settle upon a financial structure, they will find change is difficult and costly. Vested interests arise, and attain political and economic influence quickly. The dangers of too impetuously settling upon a financial structure seem clear. But the process of privatization and establishing a well functioning market economy requires effective capital markets. Delay is costly, perhaps impossible. At the very least, it is hoped that the remarks in this paper may prove of some help in thinking through some of the key aspects in the design of financial markets and institutions.

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