FINANCIAL LIBERALIZATION:
THE KEY ISSUES

Yılmaz Akyüz*

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Preface

The ongoing global financial crisis has exposed dangerous flaws in the financial sectors of many economies. There is also a crisis of analysis and ideas about the financial sector, its role in the economy, and theories about its development. For a long time, these ideas have been anchored on the notion that policies of deregulation and liberalization constituted the core policies needed for finance to play a socially constructive role.

The South Centre is pleased to reprint this piece, originally published in 1993, by Yilmaz Akyuz, the Centre’s Chief Economist, which policy makers and scholars alike will find useful in these troubled times. The paper takes a theoretical approach to understanding, interpreting and critiquing the policy proposals of those times when sudden thoroughgoing financial deregulation (politically called “big-bang” approaches) were all in vogue. The current crisis cannot be overcome unless light is thrown on the flaws in thinking that underlie approaches to reviving and restructuring financial sectors and new approaches introduced.

The paper provides a comprehensive review of the issues involved in financial development and regulation. For example, there is a theoretical discussion of why it is not likely that removing ceilings on interest rates will result in a greater volume of savings – a battle cry of economics profession in those times as the key policy for raising investment rates. Moreover, there are theoretical reasons why high interest rates can damage macroeconomic stability and investment, as has indeed been seen in actual practice. It provides a clear conceptual contrast between the notions of financial deepening, on the one hand, and increased savings-investment flows, on the other, and the conditions under which financial deepening can improve conditions in the real economy.

The paper also discusses the relative merits of bank-based versus market-based finance. The theoretical issues involved in external financial liberalization are extensively treated, starting from the evidence that international capital flows do not in practice improve the international allocation of savings.

Particularly in regard to developing countries, Akyuz suggests that:

The focus of financial policies in developing countries should be industrialization and stability. A common feature of all modern examples of industrialization is that they have all succeeded in making finance serve industry and trade not the other way round. This has often necessitated a considerable amount of intervention and control over financial activities.

In fact, at a time when more people, including in the developed countries, are talking about finance serving the real sector, these ideas are extremely timely.

Indeed, this paper, published in 1993, is far ahead of its time in warning about the dangers of financial liberalization when it was in its ascendancy.

Already in the 1980s UNCTAD (in Trade Development Reports) and Yilmaz Akyuz argued against big-bang deregulation of financial markets and institutions in developing countries and from early 1990s against the liberalization of capital account. It was argued that
these would reduce the ability of developing countries to use finance for industrial development and result in increased instability and crises of the kind that have recurred in the past three decades. This work indeed anticipated several shortcomings of unfettered finance that are now widely recognized.

The paper argues that financial deepening does not necessarily raise economic efficiency and add to growth and development. Markets do not always reflect fundamentals in their valuations or direct resources to their more socially productive uses. These deviations reflect pervasiveness of speculation. These shortcomings are now widely recognized, particularly that beyond a certain point financial deepening becomes an impediment to growth (see Bank for International Settlements working paper No. 381).

The paper challenges the conventional wisdom that even in the absence of prudential regulations, there will be limits to risk taking in the banking sector and argues that banks tend to engage in speculative financing when failure does not have serious consequences for their managers and shareholders thanks to implicit or explicit guarantees for bailouts and easy access to lender of last resort financing – a systemic failing laid bare by the recent global crisis.

It also argues that conventional prudential regulations, including strict capital adequacy requirements of the kind agreed in the Bank for International Settlements, would not be sufficient to prevent instability and bank failures and warns that pressures often develop to allow banks to enter into new lines of business in order to boost profits– as indeed happened in the US in the past decade.

The paper argues that there is no single way of organizing finance. The efficiency of the financial system depends on the way it is organized and a key issue for developing countries is what types of financial institutions and markets need to be promoted. It compares and contrasts the bank-based and market-oriented systems. While the bank based system is found to be superior in terms of efficiency and stability, it is also noted that a successful operation of such a system would require a number of checks and balances to prevent corruption, collusive behaviour, speculation and inefficiency – issues which have become highly pertinent after the global financial crisis triggered by speculative lending and investment in the US and Europe.

A key area where research in UNCTAD/Trade Development Reports and this paper was well ahead of the curve is external liberalization and financial openness. This work challenges the mainstream view promoted at the time that external financial liberalization is desirable on efficiency grounds (in terms of its impact on the level and allocation of investment) and these efficiency gains more than compensate for the loss of policy autonomy. It is argued that international capital flows rarely improve the international allocation of savings – most of them are driven by short-term, speculative capital gains rather than by real investment opportunities. It warns that the surge in capital flows to Latin America, notably to Mexico, that was taking place in the early 1990s could end with a bust, leading to payments and debt crises with devastating effects on incomes and jobs and poverty. Indeed in Trade and Development Reports, UNCTAD constantly monitored capital flows to developing countries in the 1990s, drawing attention to vulnerabilities in various parts of the developing world to boom-bust cycles, including Latin America, East Asia and elsewhere, advocating (some 15 years before the IMF) controls over capital inflows including market-friendly taxes and direct restrictions, as a way of preventing such cycles.
We believe that a reprint of this paper will be beneficial not only for the historical record but also for the important analysis and messages that are just as relevant today.

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THE KEY ISSUES

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I have greatly benefited from comments and suggestions made by various people, including the participants of a workshop on Financial Globalization and Systemic Risk at the Center on International Economic Relations, University of Campinas, Sao Paulo, 15-16 June 1992; the participants of an ECLAC/UNU-WIDER/UNCTAD seminar on Savings and Financial Policy Issues in African, Asian, Latin American and Caribbean Countries, ECLAC, Santiago, 5-6 October 1992, particularly Carlos Massad and Gunther Held; and my colleagues in UNCTAD, Shahen Abrahamian, Andrew Cornford, Detlef Kotte and Cem Somel. The examination of financial efficiency in terms of various concepts of risk in section 5 owes a great deal to discussions with Jan Kregel. None of the persons mentioned are, of course, responsible for any errors.
The opinions expressed in this paper do not necessarily reflect the views of UNCTAD, and the designations and terminology used are those of the author.

Comments on this paper are invited and should be addressed to the author, c/o the Editorial Assistant, Editorial Board, United Nations Conference on Trade and Development (UNCTAD), Office E-9013, Palais des Nations, 1211 Geneva 10, Switzerland. Copies of *UNCTAD Discussion Papers* may also be obtained from this address.
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Introduction

In recent years financial policies in both industrial and developing countries have put increased emphasis on the market mechanism. Liberalization was partly a response to developments in the financial markets themselves: as these markets innovated to get round the restrictions placed on them, governments chose to throw in the towel. More important, however, governments embraced liberalization as a doctrine.

In developing countries, the main impulse behind liberalization has been the belief, based on the notion that interventionist financial policies were one of the main causes of the crisis of the 1980s, that liberalization would help to restore growth and stability by raising savings and improving overall economic efficiency; greater reliance on domestic savings was necessary in view of increased external financial stringency. However, these expectations have not generally been realized. In many developing countries, instead of lifting the level of domestic savings and investment, financial liberalization has, rather, increased financial instability. Financial activity has increased and financial deepening occurred, but without benefiting industry and commerce.

In many industrial countries the financial excesses of the 1980s account for much of the sharp slowdown of economic activity in the 1990s. Financial deregulation eased access to finance and allowed financial institutions to take greater risks. The private sector accumulated large amounts of debt at very high interest rates on the expectation that economic expansion would continue to raise debt servicing capacity while asset price inflation would compensate for high interest rates. Thus, when the cyclical downturn came, borrowers and lenders found themselves overcommitted: debtors tried to sell assets and cut down activity in order to retire debt, and banks cut lending to restore balance sheets. Thus, the asset price inflation was replaced by debt deflation and credit crunch.

The recent experience with financial liberalization in both industrial and developing countries holds a number of useful lessons. This paper draws on this experience to discuss some crucial issues in financial reform in developing countries. The focus is on how to improve the contribution of finance to growth and industrialization; developing the financial sector and promoting financial activity is not synonymous with economic development.
I. Interest rates and savings

One of the most contentious issues in financial policy is the effect of interest rates on savings. There can be little doubt that short term, temporary swings in interest rates have little effect on private savings behaviour since that is largely governed by expectations and plans regarding current and future incomes and expenditures: they alter the level of savings primarily by affecting the levels of investment and income. However, when there is a rise in interest rates that is expected to be permanent (for instance, because it is the result of a change in the underlying philosophy in the determination of interest rates), will consumer behaviour remain the same, or will the propensity to save rise? The orthodox theory expects the latter to occur, and thus argues that removing "financial repression" will have a strong, positive effect on savings (Shaw, 1973, p. 73).

Empirical studies of savings behaviour typically do not distinguish permanent from temporary changes in interest rates. Recent evidence on savings behaviour in a number of developing countries that changed their interest-rate policy regimes shows no simple relation between interest rates and private savings. This is true for a wide range of countries in Asia and the Middle East (Indonesia, Malaysia, Philippines, Sri Lanka, Republic of Korea and Turkey - Cho and Khatkhate, 1989; Amsden and Euh, 1990; Lim, 1991; Akyüz, 1990), Africa (Ghana, Kenya, Malawi, Tanzania and Zambia - Nissanke, 1990), and Latin America (Massad and Eyzaguirre, 1990) that undertook financial liberalization, albeit to different degrees and under different circumstances.

But this should come as no surprise:

- Even according to the conventional theory, the personal propensity to save from current income depends on the relative strength of two forces pulling in opposite directions, namely the income and substitution effects. Moreover, if current income falls relative to expected future income, a rise in interest rates can be associated with a fall in savings. This often happens when interest rate deregulation occurs during rapid inflation and is accompanied by a macroeconomic tightening that results in a sharp decline in employment and income.
A large swing in interest rates can lead to consumption of wealth, especially when non-interest income is declining. This is true especially for small savers who can react to increases in interest rates by liquidating real assets and foreign exchange holdings in order to invest in bank deposits in an effort to maintain their standard of living, consuming not only the real component of interest income but also part of its nominal component corresponding to inflation. This tendency is often reinforced by "money illusion" or the inability to distinguish between nominal and real interest incomes, something that tends to be pervasive in the early stages of deregulation. Thus, the initial outcome of deregulation can be to lower household savings, particularly if it is introduced at a time of rapid inflation. For instance in Turkey high deposit rates in the early 1980s allowed a large number of small wealth-holders to dissave.

The behaviour of households may be quite different from that assumed in conventional theory. For instance, they may be targeting a certain level of future income or wealth. Higher interest rates may then lower household savings by making it possible to attain the target with fewer current savings. For instance, in the Republic of Korea and Japan low interest rates combined with high real estate prices have tended to raise household savings (Amsden and Eu, 1990).

Financial liberalization can lower household savings by allowing easier access to credit and relaxing the income constraint on consumption spending. In many countries financial liberalization has, indeed, given rise to a massive growth in consumer loans (such as instalment credits for cars and other durables, credit card lending etc.). This appears to have been one reason why the household savings rate declined and the debt/income ratio rose in the 1980s in the United States - something which is at the heart of the current debt-deflation process (UNCTAD 1991, part two, chaps. I-II; 1992, part two, chap. II). An inverse correlation between household borrowing and savings ratios has also been observed in most other OECD countries since the early and mid-1980s (Blundell-Wignall and Browne, 1991).

Even if financial liberalization and higher interest rates do not lower personal savings, they can reduce total private savings and aggregate domestic savings by redistributing income away from debtors - a category which typically includes corporations and the government. In many developing countries undistributed corporate profits are an important
part of private savings and the most important source of business investment. Generally, the savings rate is higher than for households: corporate retentions are high, ranging between 60 to 80 per cent of after-tax profits, because ownership is usually concentrated in the hands of families and there is no outside pressure to pay out dividends (Honohan and Atiyas, 1989; Akyüz, 1991). The redistribution of income from corporations to households through higher interest rates can thus reduce total private savings even if it raises household savings. In developing countries this effect can be particularly strong because firms operate with high leverage, loan maturities are short and corporate debt usually carries variable rates. Thus, a rise in interest rates not only raises the cost of new borrowing but also the cost of servicing existing debt. Evidence from the studies already mentioned suggests that in a number of countries (e.g. Philippines, Turkey, Yugoslavia), sharp increases in interest rates were a major factor in the collapse of corporate profits and savings that took place particularly in the early phases of financial liberalization.

Such adverse effects are especially marked when interest rates are freed under rapid inflation. There is a widespread agreement that financial liberalization undertaken in an unstable environment may make things worse, and that such reforms should be undertaken only after macroeconomic balances are attained (World Bank 1989; Edwards, 1989). Nevertheless, many countries have resorted to liberalization as part of shock therapy against stagflation.

Thus, interest rate increases are not a reliable instrument for raising domestic savings, but can damage macroeconomic stability and investment. The crucial question is how to design interest rate policies compatible with sustained stability and growth.

The historical experience of major industrial countries holds some useful lessons. Until the 1980s real short term interest rates in these countries were slightly negative and real long-term bond rates slightly positive; i.e. about one to two per cent below and above inflation respectively. Until the oil shocks of the 1970s, there was sustained growth and price stability. But since the beginning of the 1980s (for reasons to be discussed later) real interest rates have been, on average, more than twice their historical levels. Nevertheless, these countries enjoyed one of the longest periods of economic expansion in the postwar period with low inflation. This generated a widespread perception that high real interest rates do not
impede investment and growth, but help price stability. However, the subsequent debt-deflation-cum-recession has clearly shown that economic expansion attained at very high real interest rates eventually depresses income, investment and growth.

II. Financial liberalization and deepening

It is generally agreed that financial liberalization raises financial activity relative to the production of goods and non-financial services. However, there is much less consensus on the causes and effects of this "financial deepening". According to the financial repression theory (McKinnon, 1973; Shaw, 1973) financial deepening represents increased intermediation between savers and investment because higher interest rates raise savings and shift them from unproductive assets towards financial assets, thereby raising the volume of productive investment.

While it is true that financial liberalization can shift existing savings toward financial assets, reallocation is not the only and even the most important reason for financial deepening. Financial liberalization can also lead to deepening by redistributing savings and investment among various sectors, and by creating greater opportunities for speculation. Since these can worsen the use of savings, financial deepening is not necessarily a positive development.

The prime role of the financial system in the savings/investment process is to intermediate between deficit and surplus sectors rather than to transfer aggregate savings into aggregate investment. Deficit sectors (typically the corporate sector and the government) save as well as invest, while surplus sectors (households) invest as well as save. Thus, redistribution of savings and investment among sectors can, by changing sectoral surpluses and deficits, result in financial deepening without any change in aggregate savings and investment - for instance, as already noted, when higher interest rates redistribute income and savings from debtors to creditors. Even when this does not alter the volume of aggregate savings (i.e. lower savings of debtors are compensated by higher savings of creditors), it increases deficits and surpluses and, hence, the amount of financial intermediation. Indeed, financial intermediation can increase while aggregate savings and investment fall (Akyüz,
1991). This can happen even under the orthodox assumptions that saving rates are positively related to the interest rate and that savings determine investment and growth (Molho, 1986, p. 112).

In such cases financial deepening is a symptom of a deterioration of the finances of the corporate and public sectors, reflecting an accumulation of debt in order to finance the increased interest bill rather than new investment. Financial deepening driven by such Ponzi financing has been observed in a number of countries (e.g. Turkey, Yugoslavia and New Zealand) where financial liberalization redistributed income in favour of creditors and encouraged distress borrowing.

Similarly financial deepening can be the result of a redistribution of a given volume of aggregate investment, when, for instance, higher interest rates induce households to reduce investment in housing and shift to bank deposits. Then, the increase in the household surplus and in the volume of deposits represents a decline in household investment, not a rise in savings.

Financial liberalization often raises holdings of both financial assets and liabilities by firms and individuals at any given level of income, investment and savings. This tendency to borrow in order to purchase assets is driven by the increased scope for capital gains generated by financial liberalization. Liberalization increases the instability of interest rates and asset prices, thereby raising prospects for quick profits through speculation on changes in the market valuation of financial assets. It also allows greater freedom for banks and other financial institutions to lend to finance activities unrelated to production and investment, and to firms and individuals to issue debt in order to finance speculation. These can generate considerable financial activity unrelated to the real economy, and lead to financial deepening - as in the United States in recent years through leverage takeovers, mergers, acquisitions and so on (UNCTAD, 1992, part two, chap. II).

Deepening can also result from the impact of changes in interest rates on the form in which savings are held. Indeed, one of the main reasons why savings do not in practice strongly respond to increases in real interest rates is the existence of a range of assets with different degrees of protection against inflation; for, returns on such assets also influence
savings decisions. The greater is the influence of interest rates on the allocation of savings among alternative assets, the smaller is the influence on the volume of savings.

Whether shifts of savings into financial assets improve the use of resources depends on where they come from and how efficiently the financial system is operating. Clearly, a switch from commodity holdings can improve the use to which savings are put. But, contrary to widespread perception, there is very little evidence of extensive commodity holding in developing countries as a form of savings. Such holdings entail substantial storage and transaction costs, making their own real rate of return typically negative. Moreover, there is considerable uncertainty regarding the movement of prices of individual commodities even when the general price level is rising rapidly. These factors, together with the existence of more liquid, less costly inflation hedges (such as foreign currency or gold) reduce the demand for commodities as a store of value. The large commodity holdings that exist in African countries typically reflect the nature of production and non-monetization of the rural economy. Consequently, increases in deposit rates are often unable to induce liquidation of commodity stocks (Aryeetey et al., 1990; Mwega, 1990; Nissanke, 1990).

An increase in domestic interest rates can induce a shift from foreign currency holdings to domestic assets, and repatriation of flight capital. Many governments, however, have found it necessary to legalize foreign currency holdings and introduce foreign currency deposits for residents and to offer very high interest rates in order to attract foreign currency holdings to the banking system. Certainly, in both cases the portfolio shifts can increase the resources available for investment and deepen finance. However, as discussed in section 8, capital flows and dollarization resulting from such policies often prove troublesome for macroeconomic stability, investment and competitiveness.

Freeing interest rates in the formal sector can also trigger a shift away from informal markets. However, the scope of such shifts may be limited since the reason for informal markets is not always interest rate controls and credit rationing. They often provide services to small and medium producers who do not have access to bank credits. Since financial liberalization does not always improve their access to banks, informal markets continue to operate after the deregulation of interest rates. As savings placed in the informal sector assure these producers some access to credit, they are not always willing to shift to banks when
deposit rates are raised (Chipeta, 1990; Aryeteey et al., 1990; Mwega, 1990). On the other hand, when funds are shifted to banks, the cost of finance for informal market borrowers can rise considerably. Moreover, such shifts can result in financial "shallowing" because informal markets provide more financial intermediation due to the absence of liquidity and reserve requirements (Wijnbergen, 1983; Owen and Solis-Fallas, 1989).

It can thus be concluded that financial deepening brought about by liberalization is not necessarily associated with a higher level and/or better use of savings. Indeed, the empirical evidence does not support the claim that financial deepening is associated with faster growth (Dornbusch and Reynoso, 1989). The degree of financial deepening is therefore not a good measure of the contribution of finance to growth and development.

The relevant issue in financial reform is efficiency rather than deepening. There are various concepts of efficiency of financial markets and institutions (Tobin, 1984), but from the point of view of the role of finance in economic growth and development, the conventional notions of allocative and productive (i.e. cost) efficiency are the most relevant ones.

III. Allocative efficiency

Market failure

Financial markets and institutions can be said to be allocatively efficient if they direct resources to their more socially productive use; i.e. if they finance investment with the highest social rates of return. This concept broadly corresponds to what Tobin (1984, p. 3) calls functional efficiency and provides a rationale for devoting resources to financial activity.

Allocative efficiency is closely related with the extent of "the accuracy with which market valuations reflect fundamentals" ("fundamental-valuation efficiency", Tobin, 1984, p. 5). Prices of financial assets provide market signals for resource allocation. Speculative bubbles in securities markets influence investment and consumption decisions as well as
financing plans of corporations while exchange rate misalignments cause misallocation of resources between traded and non-traded goods sectors.

There is ample evidence that in industrial countries financial liberalization has resulted in a considerable increase in the volatility of interest rates, equity prices, exchange rates and the prices of real estate, gold, silver and collectable assets, and caused large and sustained deviation of these from their fundamental values (e.g. Cutler, Poterba and Summers, 1990; Miller and Weller, 1991; Kupiec, 1991). Similarly, "(t)akeover mania, motivated by egregious undervaluations, is testimony to the failure of the market on this fundamental-valuation criterion efficiency" (Tobin, 1984, p. 6). These deviations reflect pervasiveness of speculative forces: "the similarity of patterns in a wide range of asset markets suggests the possibility that they are best explicable as a consequence of the speculative process itself." (Cutler, Poterba and Summers, 1990, p. 36)

Quite apart from the distorting effects of speculation on asset prices and resource allocation, financial markets also fail to allocate resources efficiently because of a number of imperfections not attributable to government intervention. These include missing markets, asymmetric and incomplete information, and various externalities not mediated by markets (Stiglitz and Weiss, 1981; Greenwald and Stiglitz, 1986; Stiglitz, 1989a; Datta-Chaudhuri, 1990). Such market failures are more serious in developing than in developed countries and tend to obstruct the learning process which plays a key role in modern industrialization. "Learning ... means that it will not be optimal to pursue myopic policies; one cannot use current comparative advantage as the only basis for judgements of how to allocate resources. Moreover, it may be optimal to initially incur a loss; the imperfections of capital markets thus may impose a more serious impediment on LDCs taking advantage of potentials for learning" (Stiglitz, 1989a, p. 199).

**Successful intervention**

Governments in many countries have therefore acted to influence the allocation and pricing of finance as part of their industrial policy. Indeed, almost all modern examples of industrialization have been accompanied by such intervention. Directed and preferential credits have been the most important instruments of some successful industrializers in East
Asia (Amsden, 1989; Bradford, 1986; Cho and Khatkhate, 1989; Hanson and Neal, 1985; Westphal, 1990). As noted by a recent report, in Japan an important instrument of intervention was policy-based finance, used through the Japan Development Bank "to induce the private sector to achieve specified policy objectives". It was based on the recognition that "if the private financial market were perfect (in terms of competition, information and freedom of transactions) policy-based finance would be unnecessary. In reality, however, there are limits to the perfect fulfillment of these conditions in the financial market. Thus, one can understand the significance of policy-based finance as one means of compensating for these market limitations".

In the Republic of Korea "government intervention was necessary not just to steer credit in the right direction but to underwrite production during the learning process that was far more involved than what is commonly meant by 'infant industry protection.' Subsidized credit meant the difference between establishing new industries or not, rather than the difference between high and low profits" (Amsden and Euh, 1990, p. 31). Thus, "extensive intervention by the government with South Korea's financial system can be viewed as an internal capital market and, consequently, it could have led to a more efficient allocation of credit than possible in a free-market financial system" (Lee, 1992, p. 187).

But many countries have directed credit with much less success. The differences between successful and unsuccessful intervention have been partly due to skill in "picking winners". While it is true that governments are not necessarily better equipped to do this than markets, the experience strongly suggests that whether a firm (or an industry) is a winner depends on how it is managed. A number of factors seems to separate success from failure in this respect:

- The ability of governments to prevent the interventionist finance from degenerating into inflationary finance, to resist excessive credit expansion and to ensure fiscal discipline: macroeconomic stability appears to have been a more important factor in growth than financial liberalization and deepening (Dornbusch and Reynoso, 1989).
To make provision of support conditional upon good performance, and to see that government support and protection are actually used for the purposes intended rather than simply as a handout.

To design objective, well-defined and market-based performance indicators - namely, competitiveness in world markets and export performance - in order to assess the nature and extent of the support needed, and whether it is being used effectively (Amsden, 1989; Westphal, 1990).

To attain social consensus on the purpose and modalities of government intervention. As noted by a recent report this was particularly important in the success of the policy-based finance in Japan: "when the government does intervene in private economic activities, or carries out economic activities itself in place of private actors, it must not merely give some abstract reason, but rather clearly explain the concrete need for and obtain social agreement on those activities". This has been achieved through extensive participation of the private sector in the policy-formation process based on the "public-private cooperative system", i.e. in the advisory councils including "industry leaders and general citizens" as well as bureaucrats, which is still widely used.

Measuring efficiency

As noted above, the main impulse to financial liberalization in developing countries has come from the frustration with ineffective and wasteful intervention and the belief that liberalization would raise allocative efficiency. Thus, many countries have chosen to liberalize finance rather than reform their industrial policies and state intervention. However, this has not always resulted in a better allocation of credits.

In the orthodox theory better allocation means a tendency towards equalization of rates of return on investment in different sectors. Similarly, a more efficient credit allocation is expected to reduce the variation of the cost of finance across borrowers on the assumption that profit maximization requires equalization of marginal cost of borrowing and marginal rate of return on investment (Cho, 1988).
These measures, however, are highly inappropriate. First of all, as discussed below, one important determinant of the rate of return and cost of capital is risk. When projects carry different risks, an optimal allocation must reflect these differences in rates of return and borrowing costs. More important, when capital markets are short-sighted, equalization of profit rates typically means discriminating against those firms and industries with dynamic comparative advantages and learning potentials that have to incur initial losses. Since financial liberalization is often associated with a shortening of time horizons, a tendency towards equalization of rates of profit and cost of capital could worsen allocation.

Financial liberalization normally reduces or eliminates credits on preferential terms and hence diminishes variations in cost of capital across sectors. Therefore, measuring the effect of financial liberalization on allocative efficiency in terms of reduced variations in cost of capital is tautological. On the other hand, a successful industrial policy could reduce variance in borrowing cost by diminishing the number of industries requiring special treatment. For instance, it has been argued that the decline in the inter-industry variance of borrowing costs in the Republic of Korea in the 1980s compared to the 1970s reflects the success not of financial liberalization as suggested by some authors (e.g. Cho, 1988), but of industrialization policies (Amsden and Euh, 1990, pp. 43-44).

Financial liberalization in developing countries often changes significantly the sectoral allocation of credit. Evidence suggests that typically the shares of service sectors, consumer loans and property-related credits tend to increase at the expense of industry. This may result from a reduction in directed credit allocation, which often favours industry and does not necessarily indicate a deterioration of resource allocation. However, it is important to note that these changes are often associated with shortening of maturities and declines in demand for manufacturing investment credits, when liberalization takes place in an unstable environment and results in very high and volatile interest rates.

Perhaps more important indicators of the effects of financial liberalization on allocative efficiency are the number of non-performing loans, loan default rates and bank failures. Evidence from a number of countries (e.g. the Southern Cone countries, Indonesia, the Philippines, Turkey and Yugoslavia) indicates that deregulation of interest rates and elimination of restrictions on financial activities have almost always been followed by
increases in the proportion of non-performing loans in bank portfolios and in bank failures. Again, resort to liberalization to cure instability and stagnation has often played an important role. These, together with external shocks, had already greatly weakened the balance sheets of the corporate sector and financial institutions. Deregulation of interest rates, often accompanied by monetary tightening, further disrupted the financial position of the highly-leveraged corporate sector, leading to increased loan default rates and eventually to bank failures.

IV. Productive efficiency and cost of finance

The traditional concept of productive efficiency refers to microeconomic efficiency of firms in producing goods and services with given prices for their inputs. When applied to the financial system, this concept would simply be translated into intermediation cost or interest spread. However, one must approach productive efficiency from a broader perspective and define it as the ability of the financial system to provide finance at the lowest possible cost. This depends not only on the extent to which financial intermediaries minimize the cost of intermediation between the ultimate lender and the ultimate borrower, but also on the ability of the entire financial system to minimize the interest paid to the ultimate lender (the lender's interest rate).

Risk, uncertainty and interest rates

The Keynesian notions of lender's and borrower's risks provide an appropriate framework for discussing the determinants of cost of finance and the effects of financial liberalization on productive efficiency (Keynes, 1936, p. 144). An important determinant of the lender's interest rate is the risk due to the possibility of default by the borrower, i.e. the lender's risk. First, there is the risk of voluntary default, or what Keynes calls the moral risk: the lender must make an allowance for the possibility of dishonesty of the borrower. Second, involuntary default arising from imperfect foresight, i.e. from uncertainties over factors outside the control of the borrower which affect profitability. This risk, called the borrower's risk or the pure risk, is inherent in all investment decisions and cannot be eliminated. However, it can be reduced by the access of the borrower to better information and stabler
economic conditions. The pure risk is closely related to allocative efficiency. When finance is not efficiently allocated, the probability of involuntary default increases. This raises the lender's risk and the cost of finance: allocative inefficiency thus aggravates cost inefficiency.

The lender also runs a risk regarding the capital value of his assets due to uncertainties over future interest rates and asset prices (as well as the price level). The capital-value uncertainty increases with the volatility of asset prices and interest rates, as well as with the increased frequency of bank failures. These raise liquidity preference and lower the demand for capital-uncertain assets, thereby shortening the maturities of financial assets and pushing up interest rates, especially long-term. The degree of productive efficiency of the financial system therefore depends in part on its ability to attain stability and reduce capital-value uncertainty.

The search for greater allocative efficiency through financial liberalization can greatly reduce the productive efficiency of the financial system by giving rise to increased financial instability and raising the cost of finance to investors. This is a systemic influence, quite independent of any rise in interest rates that may result from eliminating ceilings. Indeed, the financial instability and bank failures stemming from financial liberalization in the major industrial countries, especially the United States, in the 1980s played a major role in considerably raising long-term interest rates and reducing their sensitivity to changes in short-term rates (Akyüz, 1992, pp. 59-60).

**Intermediation margin**

The second component of cost of finance, namely the intermediation margin, reflects the microeconomic efficiency in the use of resources devoted to financial activity. This is particularly important in bank finance even though mark-ups of intermediaries in stock exchanges are not negligible (Tobin, 1984, p. 4). The spread between lending and deposit rates is influenced by operating expenses, legal reserve and liquidity requirements as well as by the pressure of competition on profit mark-ups. Reserve and liquidity requirements are typically lowered as part of financial liberalization. Similarly, operating expenses and profit mark-ups tend to fall as entry barriers are dismantled.
However, financial liberalization also tends to increase the spread by raising the rate of default on loans since banks often pass the cost of bad loans onto other borrowers. Therefore, erroneous investment and financing decisions and allocative inefficiency can lead to cost inefficiency by raising not only the lender's interest rate, but also the spread. The increase in the cost of finance, in turn, can push sound borrowers into insolvency, thereby increasing loan default rates and pushing up the lender's risk and the lender's interest rate further. This often leads to Ponzi financing whereby banks increasingly lend to high-risk, speculative business at very high interest rates in order to cover high deposit rates and defaults. Such a process is unsustainable, but it can nevertheless cause considerable waste.

V. Regulation of finance and financial stability

The preceding discussion has shown that stability is an essential attribute of an efficient financial system. After many episodes of turmoil in financial markets in both developing and developed countries, there now appears to exist a consensus on the need for prudential regulations in order to attain stability. But, can such regulations and supervision prevent financial instability when interest rates are allowed to fluctuate freely and banks are left free to compete for deposits by bidding up interest rates?

Risk-taking by banks

The theory of finance suggests that because information is imperfect and asymmetric (the borrower knows more about his investment than the lender) and contracts are incomplete (lenders cannot control all aspects of the borrower's behaviour), banks implement their own quantity rationing by imposing credit ceilings, and restrict deposit and loan rates in order to avoid excessive risk-taking (Stiglitz and Weiss, 1981; Davis, 1993, pp. 13-16). Since higher interest rates tend to reduce the average quality of loans through adverse selection (lending to high-risk borrowers willing to pay high interest rates) and moral hazard (inducing "good" borrowers to invest in riskier projects), the expected rate of return net of default will decline once the loan rate has reached a certain level. This implies that even in the absence of prudential regulations, there will be limits to price competition and risk-taking in the banking sector.
However, self-restraint cannot always be relied on to prevent financial instability, particularly in developing countries. Banks tend to engage in speculative financing and excessive risk-taking provided that failure does not have serious consequences for their shareholders and managers. This happens when they can easily acquire deposit insurance, enjoy implicit or explicit guarantees for bail-out and have easy access to the lender-of-last-resort facility, and when sanctions and penalties for failing bank managers are inadequate. This is often the case in developing countries where governments are often all too ready to rescue banks in trouble. The moral hazard that results is made worse by the existence of deposit insurance schemes designed to give protection to depositors and attract funds into banks. Banks often have to pay very little for the insurance coverage while having all the incentives to raise deposit rates to mobilize funds to invest in high-return, high-risk, and often speculative projects.

Furthermore, in developing countries large non-financial corporations are often able to exert strong influence over banks, causing bank lending to be concentrated on a small number of firms, at the cost of increasing their own vulnerability. Corporate distress borrowing and Ponzi financing tend to be much more common in developing countries, and these become particularly visible and problematic during episodes of financial liberalization. The intense competition that banks in many developing countries face from unregulated financial markets can also lead to higher interest rates and greater risk-taking.

**Prudential regulations**

Evidence from both developed and developing countries shows that a judicious combination of effective prudential and protective regulations is necessary to prevent financial instability. In many developing countries, however, regulations restricting excessive risk-taking and/or covering such risks are absent. In some countries government restrictions on lending to a single firm and the acquisition of real estate or shares in non-financial corporations are strict but not implemented. Legal provisions against bad assets are either absent or ignored, and capital requirements are either inadequate or non-existent or unimplemented. There is a widespread non-compliance even with legal reserve requirements, not always because they are especially high, but because the monetary authorities are unable to impose sufficient penalties.
However, prudential regulations, while necessary, may not always be sufficient to prevent financial instability. With the freeing of deposit rates considerable competition can build up between the newly deregulated and unregulated financial sectors, giving rise to sharp increases in deposit rates, thereby raising the loan rates and deteriorating the quality of bank assets as high-yield, high-risk lending replaces safer but lower-yielding portfolios. It is not always possible to check this process through prudential regulations on the asset side of banks' balance sheets. Pressures can develop to allow banks to enter into new lines of business in order to restore their profitability and viability in the face of higher deposit cost. Such pressures will often find favour with the liberalist view underlying interest rate deregulation, and hence result in the relaxation of constraints on types of bank lending and investment.

The experience of the United States in the 1980s illustrates how easily such a process can develop (UNCTAD, 1992, part two, chap. II). As the Fed moved away from targeting interest rates to monetarism in order to reduce inflation, and the Regulation Q ceilings on deposit rates were lifted, banks with long-term portfolios with fixed interest rates (particularly mutual savings banks and Savings and Loan Associations, S&Ls) experienced serious difficulties. Considerable pressure developed for the introduction of legislation to attract deposits to these institutions (e.g. raising deposit insurance limits) and to allow them to invest in high-yield, high-risk assets. Thus, these institutions, and subsequently commercial banks, increasingly financed consumer and credit card loans, high-yield non-investment grade (junk) bonds, leverage buy-outs, real estate acquisition, and development and construction loans. A large amount of debt was accumulated by households and firms while banks acquired high-risk assets. This process ended with the collapse of the S&Ls with an estimated cost of about $200 billion, and was replaced by a debt-deflation process already mentioned.

Stricter capital adequacy requirements of the type recently introduced by BIS (UNCTAD, 1992, part two, Annex I) could have helped to slow down this process but would probably not have prevented it. As there was simultaneously a speculative bubble in the stock-market, banks would have had no difficulty in raising capital at very favourable terms to cover their high-risk investment, but would have remained exposed to risks on both sides of their balance sheets. Indeed, this is exactly what happened in Japan where banks can account as capital almost half of accrued but unrealized capital gains on equities and use them
to offset potential loan losses. As the stock-market was rising rapidly in the 1980s, banks counted on these gains instead of setting aside reserves against potential losses on high-risk, property-related lending. The subsequent decline in stock prices, together with the fall in property prices, thus created difficulties for banks from both sides of their balance sheets.

There are also other instances of boom and bust where rapid expansion of some banks through high-risk, high-return lending increased their stock prices sharply and allowed them to raise capital at costs lower than the prudent banks. "In such cases neither public scrutiny of bank balance sheets, nor capital ratios would have prevented the propagation of the crisis" (Kregel, 1993, p. 10).

**Interest ceilings**

In short, competition among financial institutions can easily result in escalation of interest rates and/or excessive risk-taking either because prudential capital requirements become ineffective or pressures build up for relaxing controls over bank asset portfolios. Such risks are greater in developing countries. This, together with the fact that stability of interest rates and asset prices is essential for an efficient financial system, constitutes a strong case in favour of controlling interest rates as well as bank lending.

An effective way of doing this is to impose statutory ceilings on deposit and/or loan rates. Such ceilings have been widely used in industrial countries until recent years. In Japan, for instance, interest rate regulations played a crucial role throughout the postwar period and have not yet been abolished totally. Again, the recent legislation in the United States regarding the depository institutions (the Federal Deposit Insurance Corporation Improvement Act of 1991, Jones and King, 1992) stipulates mandatory restrictions on deposit interest rates for undercapitalized banks in the context of capital-based policy of prompt corrective action. Since undercapitalization is widespread among banks in developing countries, the scope for the application of such restrictions must be much greater.

Regulation of short-term interest rates through intervention in interbank markets is also essential for attaining greater financial stability and preventing frequent bank failures, particularly when there is considerable maturity mismatching between banks' assets and
liabilities. Under such conditions, large swings in interest rates can create serious dilemmas for banks. If banks respond to an unexpected increase in market interest rates by raising deposit rates, their profits can be sharply reduced and their solvency threatened. If they do not, or if they are prevented to do so by deposit ceilings, they may suffer a considerable deposit drain. Banks can respond to increased swings in short-term rates with variable-rate loans or by shortening the maturities of their assets, as they have indeed done in many countries, but when done on a large enough scale this simply transfers the interest rate risk onto the borrower and replaces it with greater credit risk.

It should be kept in mind that control over interest rates through ceilings and intervention does not eliminate the need for certain types of prudential regulations to reduce financial fragility, i.e. vulnerability to default in the corporate and household sectors (Minsky, 1982, 1986; Davis, 1993). This is particularly true in developing countries where the level of economic activity is much more variable. When activity is buoyant, banks tend to lend increasingly against assets which carry considerable capital risk, including not only illiquid assets such as property but also securities; they also expand consumer credits and invest directly in securities and property. But when the expansion comes to an end and incomes and asset prices start to fall, the quality of bank assets can deteriorate rapidly, and even set off a debt-deflation process and credit crunch. Reducing the fragility of the financial system thus calls for prudential regulations designed to prevent excessive investment and lending with considerable capital risk arising from their susceptibility to changes in the pace of economic activity.

VI. Options in financial organizations

The discussions above suggest that the efficiency of the financial system crucially depends on the way it is organized because that influences the nature and the degree of risk, uncertainty and instability. On the other hand, the experience of industrial countries shows that there is no single way of organizing finance. Consequently, an important issue in financial reform in developing (and Eastern European) countries is what types of financial institutions and markets need to be promoted.
Bank-oriented and market-oriented finance

It is possible to distinguish between two broad types of financial arrangements according to whether or not banks and capital markets serve distinct functions. In an ideal-type differentiated system banks act primarily within the monetary system, arranging payments and extending short-term commercial credits. Corporations obtain investment finance in the capital market by direct security issues, often via the intermediation of investment banks for underwriting and brokerage. Ownership of companies is highly fragmented: an important part of corporate securities is held by households and institutional investors in diversified portfolios. Such a segmentation is the essence of the Anglo-American system which we will call, for brevity, the market-oriented system.¹

In the German-type of universal banking (the bank-oriented system), on the other hand, commercial banks play a much greater role at all stages in the process of corporate investment. They provide investment finance and function also, like investment banks. They also have considerable control over firms both through their own equity holding and proxy votes for private investors, and by appointing representatives on the boards of firms. They lend primarily to firms in which they hold equity interest. Household financial wealth tends to be held in banks rather than direct securities, and bank credits account for a larger proportion of external financing of corporate investment.

There are certainly a number of variants combining elements of both systems. In the United Kingdom commercial banks do not have much control over corporations, but there is no legal separation between commercial and investment banking. In Japan commercial banks hold corporate equities but are prevented from playing a major role in the underwriting of corporate securities. Individual ownership of stocks is much smaller than ownership by financial and non-financial corporations, and corporate equity is controlled through interlocking shareholding within industrial groups where banks play a central role. Banks also control other financial institutions (e.g. pension funds) that invest in equity. Lending by

¹ The description of various systems here draws largely on Corbett and Mayer (1991), Kregel (1991) and Somel (1992). For a summary account of the structural aspects of these systems, see also Davis (1993, pp. 23-26). We do not examine here how these different systems evolved, but there can be little doubt that government policies and regulations played a major role.
banks and insurance and pension funds usually takes place within the same groups and involves purchase of company bonds as well as loans. In Japan bank credits have played a much more important role in financing business growth than in the other countries discussed here, although recently there has been a shift to securities markets.

Efficiency of alternative systems

In recent years many developing countries have been seeking to institute and promote capital markets, often as part of the structural adjustment programmes. One of the main reasons for privatizing public enterprises has been precisely to promote capital markets. Similarly, access to equity markets has been granted to non-residents in order to boost demand.

There are a number of arguments in favour of developing capital markets as a way of overcoming the paucity of investment finance in developing countries. The bank-oriented system of investment finance has traditionally been viewed as inherently problematic because of the risks associated with maturity transformation in a volatile economic environment. Such a system increases the vulnerability of firms to financial shocks since the cost and availability of bank credit often undergo sharp and unexpected changes. By contrast, capital markets are expected to provide firms with more predictable, longer-term finance, while secondary markets in securities accord savers liquidity. It is also often argued that they would exert better financial discipline over firms through shareholder action and the threat of being taken over by other firms.

While there are often serious problems and weaknesses of a bank-oriented finance in developing countries, the benefits claimed for a market-oriented system are unsubstantiated. It is often overlooked that the financial systems in Germany and Japan have not only proved to be remarkably stable, but also in the major respects discussed in sections 4 and 5 are more efficient than the Anglo-American system. Historically, financial asset prices and interest rates in Germany and Japan have been less volatile than in the United States, bank deposits more stable, and financial disruptions and bank failures less frequent. Moreover, the cost of finance to industry has been much lower in Germany and, more particularly, in Japan. Evidence suggests that high capital costs have contributed to declining competitiveness both
in industry and international banking in the United States. Lower capital costs and a more predictable supply of finance appear to have enabled Japanese firms to undertake longer-term projects, including investment in research and development whereas United States firms have been deterred (McCauley and Zimmer, 1989; Poterba, 1991; Zimmer and McCauley, 1991).\footnote{In conformity with contemporary trends and in response to outside pressure, Japan has been undergoing a transition towards a market-based and open financial system, which is not easy to reconcile with the policy of cheap finance. There have been severe fluctuations in share prices, interest and exchange rates, and a tendency for the cost of finance to rise (Martin, 1992).}

One of the main reasons for the greater stability and efficiency of the financial systems in Germany and Japan is their ability to overcome the dilemma posed by modern capital markets. As noted by Keynes (1936, chap. 12), modern capital markets reconcile the social need for investment with the preference of individual investors for liquidity. This is a necessity since "if individual purchases of investment were rendered illiquid, this might seriously impede new investment". However, while secondary markets in securities accord savers liquidity, they also open up prospects for speculation whereby most of the players "are, in fact, largely concerned, not with making superior long-term forecasts of the probable yield of an investment over its whole life, but with foreseeing changes in the conventional basis of valuation a short time ahead of the general public". Thus, these markets tend to operate like "casinos" where players speculate on the speculations of other players.

The pattern of shareholding and ownership that characterizes the German and the Japanese systems has allowed them largely to overcome this dilemma. The fact that banks and business groups with a long-term stake in the corporations hold the controlling interest means not only that secondary markets tend to be less active and volatile, but also that the managers do not need to pay much attention to how the market values their assets from day to day, and can concentrate instead on the long term. This also helps reduce liquidity preference and short-termism on the part of individual investors and portfolio managers.

The bank-oriented system can exert a different and more efficient financial discipline over enterprises than the market-oriented system. Banks in Germany and Japan (and banking groups) are often in a position to monitor the performance of management by direct access to information through their close and long-term relations with firms as shareholders and
creditors, and to intervene when needed in order to prevent failure. By contrast, in the Anglo-American system of fragmented shareholding individual investors have neither the means nor the incentive to monitor and control corporate management. In extreme cases, market discipline is exercised through hostile takeovers, but these are often disruptive and wasteful. More important, since markets tend to value the enterprise largely on the basis of short-term financial performance, the takeover threat creates pressures and incentives for the management to think short-term.

Furthermore, the internal capital market organized within banks and firms connected by cross shareholding also improves enterprise performance by reducing the borrower's risk by permitting economies of scale in collecting, processing, evaluating and disseminating information. For the same reason, there is less credit rationing in a bank-based system (Fama, 1985; Driscoll, 1991). Such a system also permits to reduce considerably the lender's risk and the rate of interest since it provides deposit holders the liquidity they seek at a smaller risk of capital uncertainty by pooling and institutionalizing the risk associated with individual investment projects, and by reducing erroneous investment decisions.

A financial system with a close interface between banks and corporations tends to lower the rate of return required by investors to undertake investment. The expected rate of return on investment must be high enough to cover both the borrower's risk and the rate of interest received by the lender. However, as noted above, the borrower's risk is an important determinant of the lender's risk. The effect of this duplication of the borrower's risk on the rate of interest can be reduced by increasing the degree of the lender's involvement in the borrower's investment and other managerial decisions, since the lender is then better able to assure himself that pure risk is being properly weighed by the borrower: indeed both components of the lender's risk (i.e. the moral risk and the pure risk) would disappear if the lender and the borrower were the same person. The bank-oriented system thus reduces the extent to which the borrower's risk is duplicated in the lender's risk and the interest rate, and, hence, lowers the cost of investment.
Requirements for an efficient bank-oriented system

These are particularly important considerations to be taken into account in reforming the financial system in developing countries where the cost of finance needs to be kept low and firms must be able to take the long view in order to succeed in "learning by doing". However, the experience of many developing countries shows that the concentration of ownership in the hands of inside investors and close relations between banks and corporations are not necessarily conducive to good enterprise performance and financial stability. Indeed, in many developing countries the equity control of corporations is in the hands of families or business groups, and interlocking ownership between corporations and banks is widespread. Such arrangements have often resulted in corruption, collusive behaviour, speculation and inefficiency. Moreover, financial instability and short-termism in bank and corporate behaviour are common features of these countries because a number of conditions essential for an efficient bank-oriented system are not always met.

First of all, for the reasons already explained, price stability is essential for a bank-oriented system. This calls for, above all, fiscal and monetary discipline and a viable and relatively stable external payments position. Prudential regulations and effective supervision are also essential in a bank-oriented system. In particular, firms should not be allowed to own and control banking organizations since this will transfer the elements of the safety net to them, and burden the monetary authorities with tasks they cannot undertake (Corrigan, 1991). In the German system prudential limits on long-term lending and individual loans, capital adequacy requirements, and effective supervision of banks’ risk exposure by an agency separate from the central bank play a central role.

One argument against market-oriented finance is that "competition in ownership is no substitute for competition in product markets" (Corbett and Mayer, 1991, p. 20). This is also true for the bank-oriented system; namely, it does not make up for lack of competition in the markets for goods and services. Thus, such a system too needs to be combined with policies depending on competition as a spur to efficiency. In those developing countries where the bank-oriented system with widespread interlocking ownership has failed, the markets for goods and services were generally highly oligopolistic and protected from competition. By
contrast, in countries where corporations were encouraged and forced to compete in export markets, a similar financial organization made a major contribution to industrialization.

Finally, new firms should have access to finance and entry into new lines of financial activity should not be impeded. This calls for some competition in the banking sector. However, competition policies should be designed to prevent monopoly power rather than to allow completely free entry into the banking sector and unlimited price competition among banks - practices that have often led to financial instability in both developed and developing countries. Furthermore, specialized banks for industrial development and controls over credit allocation can play an important role in providing finance to new entrants.

**Control and regulation of stock-markets**

While reform efforts need to concentrate in these areas, it is also true that capital markets are a reality in a number of countries and they also need to be improved. While most developing countries regulate primary issues and stipulate a number of conditions regarding their size, maturity and redemption and disclosure of information there is very little effective control over secondary markets. Irregularities such as insider trading and fraud are widespread and administrative capacity to undertake effective supervision weak.

Stock prices in many of the so-called emerging markets have been extremely erratic and subject to very large swings. By removing credit constraints financial liberalization has often triggered an increase in speculative activity by institutions and individuals. In many such countries, increased speculative activity in the secondary market caused stock prices to rise before 1987 even faster than in most of the world's major stock-markets, and to fall, again far more than elsewhere, after October 1987 (Singh, 1992). Most of these markets have again shown large swings over the last few years.

Since the size of these markets is relatively small, the direct effects of sharp falls in stock prices on the economy are negligible. However, the state of expectations in the equities market influences the exchange rate and capital flows since, as discussed in the next section, these markets are open to foreigners and/or provide alternative investment for holders of
foreign currency assets. Greater stability is thus essential to prevent destabilizing feedbacks between equity and currency markets.

One way of reducing volatility is through the so-called "circuit breakers" introduced in the United States after the October 1987 crash (Kupiec, 1991). These consist of predetermined price floors: when prices fall to the floor, trading is suspended for a predetermined period. Such measures can be particularly helpful in reducing intra-day bandwagon-type declines in stock prices. Another is through the financial transactions tax long advocated by Keynes (1936, pp. 160-161). Such a tax may help reduce speculative instability by deterring short-term trading, improve the efficiency of the stock-market and lengthen the time horizon of corporate managers (Stiglitz, 1989b; Summers and Summers, 1989).

Public or semi-public agencies with large holdings of securities can also play an important role in bringing greater stability to stock prices. For instance, in Turkey the agency dealing with privatization has operated both as a buyer and a seller in the market for the shares of privatized public companies, exerting a significant influence on prices, even though its objective has not been to stabilize the market. Institutional investors and particularly provident funds can both provide the Japanese/German type of shareholding and control over enterprises, and help to attain greater stability.

VII. External liberalization and financial openness

Recent years have witnessed the increased integration of developing countries into the international financial system in large part due to widespread external financial liberalization. Most of these countries have also liberalized imports and increasingly relied on exports for growth, but the degree of internationalization of finance has gone much further than trade. Indeed in many countries the share of transactions with international characteristics in the financial sector is far greater than the share of trade in GDP.
The concept of financial openness

By external financial liberalization we mean policy actions that increase the degree of the ease with which residents can acquire assets and liabilities denominated in foreign currencies and non-residents can operate in national financial markets, i.e. financial openness. Three broad types of transaction can be distinguished in this respect. First, inward transactions: allowing residents to borrow freely in international financial markets, and non-residents to invest freely in domestic financial markets. Second, outward transactions: allowing residents to transfer capital and to hold financial assets abroad, and non-residents to issue liabilities and to borrow in domestic financial markets. Third, domestic transactions in foreign currencies: allowing debtor-creditor relations among residents in foreign currencies such as bank deposits and lending in foreign currencies.

Our definition of financial openness is wider than capital account liberalization because it includes financial transactions among residents denominated in foreign currencies. These are an important part of banking and finance, and affect the national economy in much the same way as cross-border financial transactions (Bryant, 1987, chap. 3).

The extent of financial openness in developing countries

Widespread liberalization has occurred on all three fronts. Inward transactions are virtually free in a large number of countries, particularly in Latin America where external borrowing by the private sector, often via the intermediation of resident banks, is not subject to approval, except for capital market issues. Similarly, there are few restrictions on the access of non-resident investors to domestic capital markets. The debt crisis has played an important role in this respect: the "market-based menu" has generated new prospects for arbitrage and windfall profits and significantly raised the amount of equities and domestic-currency debt assets held by non-residents (UNCTAD, 1989, pp. 105-107). More recently, access of non-residents to national equity markets has been encouraged in the context of privatization programmes.

As for outward transactions, an increasing number of developing countries have adopted capital account convertibility in recent years - some to an extent not found in most
industrialized countries. Liberalization of transactions among residents in foreign currency, however, has gone much further. Indeed, there has been a tendency to encourage residents to hold foreign exchange deposits with banks at home, increasing the importance of foreign currency in the economy, i.e. dollarization. The share of foreign currency in total deposits in recent years reached 50 per cent in a number of developing countries in Latin America as well as in Asia (e.g. Philippines), the Middle East and Europe (e.g. Turkey and Yugoslavia). This figure is well above the levels found in some international financial centers such as London where the share of total bank claims (including inter-bank claims) on residents in foreign currencies barely exceeds 20 per cent (Bryant, 1987, chap. 3; Akyüz, 1992).

Nature of capital flows

The consequences of financial openness in developing countries have not been adequately treated in the literature primarily because this is a very recent phenomenon. Mainstream thinking is largely an extrapolation of "open economy macroeconomics", and treats the issue in the context of "sequencing of economic reforms". This literature emerged in large part from an ex post attempt to explain why the Southern Cone liberalization experiment failed (Corbo et al., 1986; Corbo and de Melo, 1987; Diaz-Alejandro, 1985; Dornbusch, 1983; Frankel, 1983; McKinnon, 1982). It takes it for granted that external financial liberalization is desirable on efficiency grounds: it is said to have positive effects on the level and allocation of investment, and these efficiency gains more than compensate for the loss of policy autonomy, i.e. reduced ability of governments to achieve national objectives by using the policy instruments at their disposal (Bryant, 1980, chap. 12).

According to this view, external financial liberalization may give rise to perverse results only if there are problems elsewhere in the economy - e.g. budget deficits, monetary instability, and distortions and imperfections in goods and labour markets. On the other hand, since it is not possible to correct these at once, external financial liberalization must be properly sequenced. Although it is sometimes argued (e.g. Krueger, 1984) that it may be difficult to control inflation without liberalizing the economy, the majority view is that domestic financial markets and the current account should be liberalized before the capital account, and that fiscal balance and monetary stability should be attained before any

The benefits claimed for financial openness are generally based on the assumption that the internationalization of finance allows savings to be pooled and allocated globally through movement of capital across countries in response to opportunities for real investment, thereby improving the allocation of resources internationally and equalizing rates of return on investment everywhere. Accordingly, external financial liberalization in developing countries is expected to give rise to capital inflows provided that it comes after domestic financial markets have been liberalized and interest rates raised. This is seen as a one-off phenomenon of adjustment of domestic interest rates to world levels as capital scarcity is reduced through an increase in the underlying capital flows.

However, the evidence strongly suggests that international capital flows do not in practice improve the international allocation of savings. There has been no narrowing of differences in rates of return on capital investment in the major industrial countries, or in real long-term interest rates; nor has the link between the levels of savings and investment in individual countries been considerably weakened (UNCTAD, 1987; Kasman and Pigott, 1988; McCauley and Zimmer, 1989; Akyüz, 1992). The main reason is that most international financial transactions are portfolio decisions, largely by rentiers, rather than business decisions by entrepreneurs. The bulk of capital movements is motivated primarily by the prospect of short-term capital gains, rather than by real investment opportunities and considerations of long-term risk and return. The speculative element is capable of generating gyrations in exchange rates and financial asset prices by causing sudden reversals in capital flows for reasons unrelated to policies and/or the underlying fundamentals. Rather than penalizing inappropriate policies, capital flows can help to sustain them, as has been the case in recent years in the United States and Italy where inflows have helped to run chronic fiscal deficits.

Thus, financial openness tends to create systemic problems regardless of the order in which various markets are liberalized and distortions removed. The exposure to short-term, speculative capital flows is much greater for developing than for developed countries because their instability provides greater opportunities for quick, windfall profits on short-term capital
movements while their ability to influence capital flows through monetary policy is much more limited.

While internal financial liberalization strengthens the link between inflation and interest rates, external financial liberalization (unlike trade liberalization) weakens that between inflation and the exchange rate, bringing the latter under the domination of capital flows instead of trade balances and the relative purchasing power of currencies: inflation differentials are more readily reflected in nominal interest rate differentials than in the movement of the nominal exchange rate. Thus, although short-term capital inflows motivated by the lure of quick, windfall profits are often associated with positive real interest rate differentials in favour of the recipient, such a differential is neither necessary nor sufficient in all cases. Capital inflows usually occur in response to a nominal interest rate differential that markets do not expect to be fully matched by a nominal exchange rate depreciation. Such differentials often emerge when domestic inflation is much higher than abroad and domestic financial markets have been liberalized. Since in many developing countries inflation rates close to those prevailing in the major OECD countries are very difficult to attain, the scope for big arbitrage opportunities to emerge is much greater. Similarly, an expectation that equity prices will rise faster than domestic currency depreciation can prompt an inflow of capital. Both types of expectation can be self-fulfilling since the inflow of funds, if large enough, can itself maintain the value of the currency and boost equity prices.

Such inflows are typically initially a response to a favourable shift in market sentiment regarding the recipient country. This shift may result from external causes such as a sudden rise in export prices, or from internal ones such as reduced inflation, better growth prospects, and greater political stability and confidence in the government's policies. After the initial shift in market sentiment, a bandwagon develops and creates a speculative bubble where people are lending or investing simply because everybody else is doing so. The boom does not necessarily peter out smoothly: a recently liberalized, well-performing economy can suddenly find favour with foreign capital of all sorts, but if things go wrong for some reason, the capital can disappear just as rapidly. When the bubble bursts and the currency comes under pressure, even a very large positive real interest rate differential may be unable to check the capital outflow.
Recent capital flows to Latin America

That was the story of the liberalization episodes in the Southern Cone in Latin America in the 1970s, when high domestic interest rates, overvalued exchange rates, freedom to borrow abroad and plentiful international liquidity combined to induce capital inflows. But there are strong signs that a similar process is again under way in a number of Latin American countries. It is estimated that the region as a whole received about US$40 billion in 1991, three times the level of 1990, the main recipients being Mexico, Brazil, Argentina, Venezuela and Chile. Not all the capital inflows have been for short-term uses, but much of them do appear to have been, particularly in Argentina and Brazil (Griffith-Jones et al., 1992, tables 4 and 5; UNCTAD 1992, part two, Annex II). In the majority of these countries capital inflows continued at an accelerated pace in 1992. In Chile where "the monetary authorities adopted a cautious approach based on the assumption that the oversupply of foreign exchange was only temporary and was due to the unusually high price of copper and the low international interest rates" ECLAC (1991, p. 41), short-term capital inflows slowed down considerably in 1992 thanks to various measures designed to reduce the arbitrage margin.

What is remarkable about recent capital inflows to Latin America is not only that the recipient countries are in very different positions compared to the 1970s, but that they differ widely among themselves with respect to inflation, fiscal posture, and exchange rate and trade policies. Argentina, Chile and Mexico have liberal trade regimes whereas Brazil has tight controls. While Brazil has had a large fiscal deficit and very high inflation, others, particularly Chile and Mexico, have had balanced budgets or fiscal surpluses, and moderate inflation. Capital has been attracted by a combination of currency appreciation and high real interest rates in Chile, Mexico and particularly Argentina (and also a booming stock-market in the latter two), but not in Brazil where the underlying factor has been very high real interest rates (about 4 to 5 per cent per month). Currency appreciation is due to exchange rate policy in Argentina (which uses the exchange rate as a nominal anchor to reduce inflation), but not in Chile and Mexico where it is market-generated. It has led to a considerable deterioration of the trade balance, especially in Argentina and Mexico.
The ideal response to such capital inflows is a corresponding increase in domestic investment in traded goods sectors. This not only prevents a sharp appreciation of the currency by raising capital goods imports, but can also enhance export capacity—something that may be needed especially when capital flows dry up or are reversed. But higher investment is not always possible when domestic interest rates are prohibitive and long-term investment with funds borrowed abroad at lower rates carries considerable exchange rate risk. In other words the high interest rates and/or currency appreciation that attract short-term capital also deter investment. In Latin America capital inflows resulted in a sharp swing in the transfer of resources abroad by about 4 per cent of the region's GDP during 1990-1991, but investment remained depressed: in Brazil and Argentina the investment ratio remained below the levels of the 1980s when these countries had been making large transfers on debt servicing.

The problems of macroeconomic management in the face of a massive capital inflow are well known. Sterilizing them by issuing domestic debt can impose a serious burden on the public sector, particularly when the arbitrage margin is large. In Brazil, for instance, the cost of carrying the extra US$5 billion of reserves purchased in this way amounted to about US$2 billion during 1991-1992, adding considerably to domestic public debt (UNCTAD, 1992, part two, Annex II; Junior 1992). Furthermore, by increasing the stock of government debt, sterilization itself tends to raise domestic interest rates and, hence, the arbitrage margin. If, on the other hand, the currency is allowed to appreciate, it can undermine the competitiveness of the domestic industry, possibly eventually triggering a sharp reversal in short-term capital flows.

Opening stock-markets to non-residents

Instability in short-term capital flows combined with the inherent volatility of investment in company equity exposes the economy to even greater risks. Since opening up domestic capital markets requires some form of currency convertibility for non-resident equity investors, a close link can develop between stock and currency markets even in countries where the capital account is not fully open. This may prove to be a serious problem in Latin America because of the increased presence of non-residents in capital markets. In Mexico, for instance, equity holding by non-residents is estimated to have amounted to more than $25
billion, or about a quarter of the market's capitalization in the second quarter or 1992 (Latin American Economy and Business, May 1992, p.4), compared to about 5 per cent in the major capital markets such as New York and Tokyo. The link between these two inherently unstable markets can be further strengthened by dollarization of the economy, when that occurs.

This link increases the potential for the emergence of foreign exchange and/or stock-market crises. Since the return on investment to the foreign investor depends largely on the movement of the exchange rate, a serious shock (e.g. a terms of trade deterioration) that makes a devaluation appear inevitable can trigger both a sharp decline in equity prices and an outflow of capital. Similarly, the mood in equity markets can exert a strong influence on the exchange rate - e.g. bullish expectations can trigger capital inflow, leading to appreciation. By contrast, a bearish mood in the capital market and/or massive profit-taking in dollars by non-residents can not only prick the speculative bubble in the stockmarket, but also lead to a currency crisis. Recent evidence suggests that chaotic feedbacks between financial and currency markets can easily develop: for instance, when the bubble burst in the Tokyo stock exchange at the beginning of 1990, there was a massive shift out of yen-denominated assets, causing also considerable drops in the government bond index and the currency (Akyüz, 1992).

**Effects of volatile capital flows on investment and trade**

One important consequence of sharp swings in the direction of capital flows and greater instability of exchange rates is to increase borrower's risk. For investors in traded goods sectors, the real exchange rate is the single most important relative price affecting profits. But firms in non-traded goods sectors are also affected depending on the imported inputs they use. Exchange rate gyrations produce considerable uncertainty regarding prospective yields of investment. By raising the average rate of return required by investors to undertake investment, particularly in the traded goods sectors, this will depress the level of investment corresponding to any given rate of interest.

The influence of the exchange rate on investment decisions increases with the share of foreign trade in the economy. It is thus of growing importance in the developing world
because of widespread import liberalization and emphasis on export-led growth. It is therefore ironic that the exchange rate is becoming increasingly determined by purely financial forces delinked from trade and investment. Exchange-rate instability can thus undermine "outward oriented" strategies by depressing investment in exports. The evidence suggests that such adverse effects have occurred even in industrial countries where firms are better equipped to hedge against unexpected swings in exchange rates, and that exchange rate stability has been characteristic of countries with sustained export growth (UNCTAD, 1987; UNCTAD, 1989, part one, chap. V).

The second systemic effect of volatile capital flows is through interest rates. As already noted, capital-value uncertainty and interest rates both rise as a result of increased borrower's risk as well as greater instability in interest rates and prices of financial assets, including equities, associated with volatile capital flows. More important, increased competition between domestic currency and foreign currency assets also tends to raise the cost of finance because of the greater risk and uncertainty in developing countries. The fact that most developing countries are economically and politically less stable than developed countries, with financial and legal systems that are less able to ensure enforcement of contracts, increases the hazards of financial investment. In a financially closed economy the safety premium on foreign currency assets is counter-balanced by the high transaction costs of shifting into them, at least for most small savers, but financial openness reduces these costs considerably. Consequently, domestic assets need to carry much higher rates of return than external assets. This can reduce investment and impair competitiveness.

**Controlling capital flows**

Complete isolation of the financial system in a developing country from the rest of world is neither feasible nor desirable. Successful export performance requires close interaction of banks at home with world financial markets in order to provide trade-related credits and facilitate international payments. The ability to borrow in international capital markets allows diversification in corporate finance while foreign investment in capital markets can help broaden their equity base and reduce their leverage. Foreign banks can bring greater competition in the provision of banking services, thereby reducing the intermediation margin and the cost of finance.
Nevertheless, most developing countries need to exercise considerable control over external capital flows in order to minimize their disruptive effects and gain greater policy autonomy to attain growth and stability. There are a number of techniques to control capital flows with different degrees of restrictions and effects, that were widely used in industrial countries in the 1960s and 1970s (OECD, 1972, pp. 71-77; Fleming, 1973; Swidrowski, 1975; Swoboda, 1976; OECD, 1981; OECD, 1982). Quantitative measures to limit short-term capital inflows through banks include reserve requirements on foreign liabilities, limits on their net external or foreign-currency positions, or on gross external or foreign currency liabilities, and minimum holding periods and blocking of foreign deposits for such periods. Similarly a number of measures may be applied to restrict external borrowings by non-banks, including reserve requirements on their foreign liabilities, and exchange controls such as prohibition of borrowing other than commercial or supplier credits received by importers, control on domestic foreign currency credits to domestic importers and exporters, and regulations regarding the timing of export and import settlements. Of these, limits on banks' net external or foreign currency positions and exchange controls regarding non-banks can also be applied to restrict outflows. Restrictions on interest payments on non-resident deposits and negative interest rates are also among the measures that can be used to deter capital inflows.

Taxes may also be used to reduce the arbitrage margin and discourage speculative capital flows. A tax designed to reduce interest differentials (like the interest-equalization tax used in the United States in the past to check outflows) can also be especially effective in checking capital inflows in developing countries where inflation and interest rate differentials with developed countries tend to be large. The tax rate can be used flexibly according to the behaviour of capital flows and the objective pursued. Similarly Keynes' proposal for a financial transactions tax may be extended to apply to international financial transactions in order to "throw some sand in the wheels" and "deter short-term financial round-trip excursions" (Tobin, 1978).

Finally, various restrictions may be introduced on the access of non-residents to capital markets. One common measure is to limit foreign ownership to approved country funds and allow transactions on such funds only among non-residents in order to control the flow of foreign funds in and out of the country via capital markets. This can be combined with the
requirement that such funds be managed by local managers who are generally more amenable to "moral suasion" by the authorities.

It should be kept in mind that in several industrialized countries capital markets have been opened to non-residents only very recently. In Japan, for instance, they were largely closed until the 1984 agreement with the United States, and even in Europe, where an integrated financial market is seen as an important step in the completion of a single EEC market, restrictions on entry into capital markets still remain in a number of countries (e.g. France and Italy). Again, the Republic of Korea only recently opened up its capital market to non-residents, but restricted foreign acquisition to 10 per cent of total equity capital, and to 2 per cent in some strategic industries.

Some of these techniques have recently been used in Latin America in order to slow down short-term capital inflows. These include reserve requirements for foreign currency liabilities (Chile and Mexico), compulsory liquidity requirements on the short-term forex liabilities of commercial banks (Mexico), minimum holding periods (Chile), extension of the fiscal stamp tax to foreign credits (Chile), restrictions on company borrowing abroad through stock and bond issues (Brazil), and limits on the dollar amounts that banks can raise in deposits abroad as a proportion of their total deposits (Mexico). However, such measures have generally had only limited success. Governments are often very shy in applying effective controls for fear of fending off genuine, long-term capital and investment. This is certainly a legitimate concern, particularly in Latin America, after a decade-long foreign exchange strangulation. However, experience shows that capital controls might have to be introduced anyway if the process develops into a payments crisis and capital flight. It may be easier to restrict short-term inflows and prevent debt accumulation early on than to check capital flight in a crisis.

Controls on capital flows are not always effective when there are large arbitrage opportunities. It is thus important to bear in mind that price stability is vital for a financially open economy, since high inflation and wide interest rate differentials with reserve-currency areas often lead to large arbitrage opportunities and encourage unsustainable capital flows. Furthermore, exchange rate management plays an important role. Explicit or implicit exchange rate guarantees tend to reduce the risk involved in arbitrage and encourage capital
flows. As noted above, this has been an important factor in attracting short-term capital to Argentina. In Chile, by contrast, "the monetary authorities moved to resist revaluation of the peso by introducing changes to create uncertainty concerning yields on short-term capital flows" (ECLAC, 1992, p. 40). These measures included the ending of the practice of advance announcement of devaluation of the peso, widening of the currency band, and linking the peso to a basket of currencies instead of the US dollar. They appear to have played an important role in slowing down short-term capital inflows and securing greater real exchange rate stability by introducing uncertainty regarding the movement of the exchange rate. In Mexico too the authorities widened the differential points for the peso-US dollar exchange rate to allow larger fluctuations, although its effects on capital flows seem to have been limited (Banco de Mexico, 1992, p. 144).

Historical experience clearly shows that capital controls are no answer when the underlying policies are not sustainable. For instance, measures to control capital inflows are generally ineffective against capital flight stemming from economic and political instability. Moreover, it is important to bear in mind that capital controls are needed not in order to pursue inappropriate policies and exchange rates, but to minimize the disruptive effects of short-term capital flows, and gain greater policy autonomy to attain growth and stability.

**VIII. Conclusions**

The focus of financial policies in developing countries should be industrialization and stability. A common feature of all modern examples of industrialization is that they have all succeeded in making finance serve industry and trade not the other way round. This has often necessitated a considerable amount of intervention and control over financial activities. On the other hand, despite widespread claims for efficiency of financial markets, financial liberalization in many countries in recent years has generated more costs than benefits. These have included persistent misalignment of prices of financial assets, resulting in inefficiencies in the allocation of resources; sharply increased short-term volatility of asset prices, resulting in greater uncertainty, shorter maturities and higher interest rates; excessive borrowing to finance speculative asset purchases and consumption, resulting in unsustainable stocks of debt, increased financial fragility and reduced household savings; and loss of autonomy in pursuing interest-rate and exchange-rate policies in accordance with the needs of trade and industry.
It is equally true that government intervention in finance has often been misguided, giving rise to inefficiency and waste. However, the appropriate response should be to reform the government and rationalize intervention rather than throw in the towel and simply "unleash market forces". The main challenge is to determine where and how governments should intervene and to make sure that the intervention achieves its aims. The discussions so far suggest the following:

- Macroeconomic stability is of cardinal importance for the stability and efficiency of the financial system since excessive volatility of prices and economic activity tends to increase financial fragility, create uncertainty, raise interest rates and shorten the time horizon. While macroeconomic stability itself is influenced by financial policies, monetary and fiscal discipline is crucial.

- In cases where directed credits and financial subsidies are successfully used as part of industrial policy, winners are not picked by "bureaucrats", but through a process based on a close interaction between the government and the business, and the use of market signals to assess risks and opportunities. Success also depends on ensuring reciprocity between support and performance; use of controls, regulations and subsidies for the intended purposes; and readiness to revise them as necessary.

- Financial policies must take account of the dual nature of interest rates: the return aspect which primarily influences the distribution of asset holdings in different forms, and the cost aspect which determines the capacity of the corporate sector to generate internal funds, to undertake investment and to compete in world markets. It is important to bear in mind that while high interest rates are not necessary to increase savings, low and stable capital cost is crucially important for investment and competitiveness.

- There is often a need for deposit ceilings and intervention in the money market in order to stabilize interest rates and asset prices, and prevent excessive risk-taking and price competition in the financial sector. Such controls should be applied with flexibility and discretion, taking into account macroeconomic conditions as well as the needs of trade and investment. Rigid rules regarding the level of real interest rates are no more sensible than those about the rate of growth of money supply in the conduct of monetary policy.
- Prudential regulations and a strong bank supervision are also essential to prevent excessive risk-taking and financing of speculative activities by banks. Measures such as capital requirements are not always enough to reduce fragility: it may also be necessary to act directly on the asset portfolios of banks and restrict lending against or investment in highly capital-uncertain assets such as securities and property, and exposure to a single firm. Firms should not be allowed to own and control banks. Protective regulations such as deposit insurance and lender-of-last-resort facilities should only be introduced in combination with prudential regulations.

- Most developing countries need to concentrate their energies in strengthening their existing bank-based financial systems rather than pin their hope on transplanting Wall Street. They also need to promote long-term equity holding via institutional investors such as provident funds, and permit banks to hold equities within prudential limits. Transfer taxes and "circuit breakers" may be used to deter short-term trading and reduce volatility in stock markets. Easy access to stock-markets and readily available short-term financial instruments paying market returns tend to increase financial instability.

- Particular care needs to be given to the design of external financial policies since mistakes in this area tend to be very costly and difficult to reverse. Allowing residents uncontrolled access to international capital markets has proved damaging in many developing countries, and short-term speculative capital flows have proved extremely troublesome. Developing countries need to exercise a considerable degree of control over external capital flows through taxes, quantitative restrictions and exchange controls in order to minimize their adverse effects on macroeconomic equilibrium, exchange rates and trade; to control the pace of accumulation of external debt; and to gain greater autonomy in monetary policy. Access of non-residents to domestic capital markets should be restricted since close links between the two inherently volatile markets can be very dangerous. It is also important to resist the temptation to dollarize the economy in order to keep capital at home: policies should address the root cause of the problem and eliminate the reasons for extensive demand for foreign currency.

- A pragmatic not a doctrinaire approach is needed towards financial control and liberalization in developing countries. Restrictions on financial flows and interest rates may
be removed over time as they fulfil their functions. Financial liberalization undertaken as a result of a successfully implemented industrial policy is very different from liberalization as a reaction to misguided and failed intervention. Has financial liberalization ever remedied stagnation and instability?
References


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