UNIVERSITY OF CAMBRIDGE
Centre for Economic and Public Policy

FINANCIAL LIBERALISATION AND THE RELATIONSHIP BETWEEN FINANCE AND GROWTH

Philip Arestis
University of Cambridge

CEPP WORKING PAPER NO. 05/05
June 2005

Department of Land Economy
19 Silver Street
Cambridge CB3 9EP
Telephone: 01223 337147

Introduction[1]

The relationship between financial development and economic growth has received a great deal of attention throughout the modern history of economics. Its roots can be traced in Lydia of Asia Minor where the first money was in evidence. The first signs of public debate, however, on the relationship between finance and growth, and indeed on experiments with free banking, can be located in Rome in the year 33 AD. In that year there was probably the first classic case of public panic and run on the banks. The Romans debated intensely and fiercely at that time the possibility of placing a hitherto free banking system under the control of the government. Since then, of course, a great number of economists have dealt with the issue. An early and intellectual development came from Bagehot (1873), in his classic *Lombard Street*, where he emphasised the critical importance of the banking system in economic growth and highlighted circumstances when banks could actively spur innovation and future growth by identifying and funding productive investments. The work of Schumpeter (1911) should also be mentioned. He argued that financial services are paramount in promoting economic growth. In this view production requires credit to materialise, and one "can only become an entrepreneur by previously becoming a debtor.....What [the entrepreneur] first wants is credit. Before he requires any goods whatever, he requires purchasing power. He is the typical debtor in capitalist society" (p. 102). In this process, the banker is the key agent. Schumpeter (1911) is very explicit on this score: "The banker, therefore, is not so much primarily the middleman in the commodity `purchasing power' as a *producer* of this commodity ..... He is the ephor of the exchange economy" (p. 74).

Keynes (1930), in his *A Treatise on Money*, also argued for the importance of the banking sector in economic growth. He suggested that bank credit "is the pavement along which production travels, and the bankers if they knew their duty, would provide the transport facilities to just the extent that is required in order that the productive powers of the community can be employed at their full capacity" (II, p. 220). In the same spirit Robinson (1952) argued that financial development follows growth, and articulated this causality argument by suggesting that "where enterprise leads finance follows" (p. 86). Both, however, recognized this as a function of current institutional structure, which is not necessarily given. In fact, Keynes (1936) later supported an alternative structure that included direct government control of investment.

Although growth may be constrained by credit creation in less developed financial systems, in more sophisticated systems finance is viewed as endogenous responding to demand requirements. This line of argument suggests that the more developed a financial system is the higher the likelihood of growth causing finance. In Robinson's (1952) view then, financial development follows growth or, perhaps, the causation may be bidirectional. However, McKinnon (1973) and Shaw (1973), building on the work of Schumpeter (chiefly 1911), propounded the `financial liberalisation' thesis, arguing that government restrictions on the banking system restrain the quantity and quality of investment (see, for example, Arestis and

[1] I am grateful to Warren Mosler and Malcolm Sawyer for extensive and helpful comments. All remaining errors, omissions and ambiguities are, of course, entirely my responsibility.

Demetriades, 1998, for further details). More recently the endogenous growth literature has suggested that financial intermediation has a positive effect on steady-state growth (see Pagano, 1993, for a survey), and that government intervention in the financial system has a negative effect on the equilibrium growth rate (King and Levine, 1993b). These developments can be considered as an antidote to the thesis put forward by Modigliani and Miller (1958) that the way firms finance themselves is irrelevant (their `irrelevance propositions'), which is consistent with the perception of financial markets as independent entities from the rest of the economy, so that finance and growth are unrelated. Despite severe doubts on the relevance of the Modigliani and Miller (op. cit.) theorem, some economists still would argue that finance and growth are unrelated. A good example of this view is Lucas (1988) who argues that economists `badly over-stress' the role of the financial system, thereby reinforcing the difficulties of agreeing on the link and its direction between finance and growth.

This paper aims to explore the issues of the relationship between financial development and growth from the perspective of evaluation of the effects of financial liberalization. Since the focus is on financial liberalization, a short review of certain related issues is in order. It used to be that banking, with banks as the first major lenders, along with rights of private ownership of investment, led to control of real investment by bank lenders. In many parts of today's world only government and banks direct much of the real investment.[2] Projects live or die by bank decision as to willingness to finance. In the G7 nations, however, in addition to government and banking, investment is directed by managers of retirement funds (both public and private), insurance companies investing their reserves, along with many other financial institutions with accumulated reserves. Individuals via their self directed pension and retirement funds, do not have much impact in this; individuals place money with financial institutions who in turn place the money as they think fit. This institutional framework has been facilitated by various pieces of accumulated legislation, such as those creating tax-deferred retirement accounts, and tax-deferred insurance reserves, along with many others. The result is a variety of professional managers responsible for facilitating real investment whose performance is measured by institutionally determined financial standards. So now there is a combination of public, commercial and managerial institutions, directing real investment, each with its own set of financial objectives, and which can be competing and/or operating at cross purposes. Failing to recognize that positive financial outcomes are not necessarily positive real outcomes has serious consequences. Many of these considerations fall under financial liberalization. However, lacking in the financial liberalization literature is a cost benefit analysis of the real costs of the financial sectors, which results from the incentives induced by the institutional structure that surrounds finance and inherent in today's real investment activity.

The financial liberalisation thesis is introduced in the section that follows. Its theory and policy

---

[2] The sentence beginning with 'it used to be that banking ...' refers to the early periods of banking as we know today. Furthermore, the argument that banks, by decisions on whether or not to grant a loan, simply means that they can effectively determine which proposed investment takes place and which does not. There is no more to the 'control of real investment', and certainly it does not refer to a more direct involvement than just whether banks accept or refuse a loan rquest.

implications are explored in a subsequent section. The problematic nature of financial liberalisation is then explored under a number of headings. A final section summarises and concludes.

The Financial Liberalisation Thesis

This paper attempts to demonstrate the problematic nature of `market liberalisation' by concentrating in an area where renewed interest has resurfaced, this being financial markets. More precisely, the focus of this contribution will be on the setting of financial prices by central banks, especially in developing countries, a fairly common practice in the 1950s and 1960s, which was challenged by Goldsmith (1969) in the late 1960s, and by McKinnon (1973) and Shaw (1973) in the early 1970s. They ascribed the poor performance of investment and growth in developing countries to interest rate ceilings, high reserve requirements and quantitative restrictions in the credit allocation mechanism. These restrictions were sources of `financial repression', the main symptoms of which were low savings, credit rationing and low investment. They propounded instead the thesis which has come to be known as `financial liberalisation', which can be succinctly summarised as amounting to 'freeing' financial markets from any intervention and letting the market determine the allocation of credit.[3]

However, left out of consideration were other policy options selected by government that preceded these policies; for example, the general case was that of various combinations of foreign fixed exchange rates and governments incurring debt in external currencies. Many of the financial restrictions subsequently imposed were designed to help sustain the exchange rate regime and support the external debt. This combination obviated otherwise available government policy responses (such as government deficit spending of local currency) to support investment and consumption at full employment levels. Instead, financial liberalization was proposed in the context of fixed exchange rates and external debt. It should, thus, have been no surprise that a variety of currency and banking crises followed the attempts at financial liberalization (see, for example, Arestis and Glickman, 2002). One might qualify straightaway by suggesting that this analysis is conducted under given institutional structure as mandated by government, and that policy options can be selected that inhibit investment. With direct government investment always an option, and accounting that recognizes government investment as such, government can always alleviate lack of investment, although typically it would be a different form of investment. It is, thus, true that government can 'allow' markets to direct real investment. The history of banking, however, as the policy makers in both developing and developed countries adopted the essentials of the financial liberalisation thesis and pursued corresponding policies, tells a rather sad story. It actually points to two striking findings.

The first is that over the past thirty years or so, financial and banking crises have been unusually frequent and severe. Especially so in developing countries with foreign fixed exchange rate policies and external debt, both relative to the experience of developed

[3] It ought to be noted that the statement 'letting the market determine' the outcome, as though the market was some natural phenomenon, is not unproblematic. What typically happens actually is that it is the banks that determine the allocation of credit, and they are often relatively few in number, an argument that is reinforced in what follows in this chapter.

countries and to the experience of the preceding three decades. The magnitude of the crises is clearly indicated by the fact that at least over *two thirds* of the IMF member countries experienced significant banking-sector problems during the period 1980-today (see, for example, Arestis and Glickman, 2002). In Africa, in Asia, and in the transition economies of central and Eastern Europe, over 90 percent of the IMF country members suffered at least *one* serious bout of banking difficulties over the period. The severity of the crises can be highlighted by the fact that at least a dozen developing-country episodes where bank balance-sheet losses and/or public-sector financial resolution costs of these banking crises amounted to 10% or more of GDP. While industrial countries have had some sizeable banking crises of their own over the period (Spain, 1977-85; three Nordic countries in the late 1980s/early 1990s; the US saving and loan debacle, 1984-91; and the recent Japanese bad loan problem[4]), the frequency and scale of crises have, on the whole, been lower than in the developing world.

The second important finding is that beyond the financial costs of banking crises for the local economies involved, they exacerbate downturns in economic activity, thereby imposing substantial real economic costs. Banks in developing countries hold the lion's share of financial assets, meaning that they are the main holders of shares, etc., operate the payments system, provide liquidity to financial markets, and are major purchasers of government bonds. In addition, bank liabilities have been growing much faster in developing countries over the past two decades than economic activity. Moreover, the increasing weight and integration of developing and emerging economies in international financial markets have resulted in spillover effects to industrialised countries. There is, thus, an increased risk that banking crises in developing economies will have unfavourable repercussions on industrial countries. A very disturbing aspect of the crises discussed in this section is that they spill over to the real economy where real output and investment are lost. This is exacerbated by the fact that the latter are not accompanied by appropriate policy responses to sustain aggregate demand, output and employment, when the exposure to which we have just referred materialises. Governments could have allowed real output to be sustained in spite of bank 'financial' difficulties, and in spite of losses by shareholders, lenders, etc. In fact, governments have allowed banking crises to alter the 'quantity' of new investment and real output, when those governments have had the option all along to allow growth to continue. More seriously, though, is the cost in terms of real output resulted from these crises. Table 1 makes the point very well. Such loss in many countries was staggering, reaching over 60 per cent in some cases, followed by substantially reduced output and employment.

We wish to argue that this experience is not unrelated to the financial liberalisation policies pursued by countries, which adopted the principles of the thesis in the context of their existing institutional structure. This we do by looking at a number of problems entailed in the thesis and at the evidence that can be adduced. We begin with a brief summary of the main propositions of the financial liberalisation thesis before we turn our attention to its problematic nature.

[4] It ought to be noted that in Japan the banking 'cost' did not hurt real output all that much, since banks were actually 'open for business' all along. Real output lagged for other reasons, mainly due to a shortage of aggregate demand.

Financial Liberalisation: Theory and Policy Implications

A number of writers question the wisdom of financial repression, arguing that it has detrimental effects on the real economy. Goldsmith (1969) argued that the main impact of financial repression was the effect on the efficiency of capital. McKinnon (1973) and Shaw (1973) stressed two other channels: first, financial repression affects how efficiently savings are allocated to investment; and second, through its effect on the return to savings, it also affects the equilibrium level of savings and investment. In this framework, therefore, investment suffers not only in quantity but also in quality terms since bankers do not ration the available funds according to the marginal productivity of investment projects but according to their own discretion. Under these conditions the financial sector is likely to stagnate. The low return on bank deposits encourages savers to hold their savings in the form of unproductive assets such as land, rather than the potentially productive bank deposits. Similarly, high reserve requirements restrict the supply of bank lending even further whilst directed credit programmes distort the allocation of credit since political priorities are, in general, not determined by the marginal productivity of different types of capital.

The policy implications of this analysis are quite straightforward: remove interest rate ceilings, reduce reserve requirements and abolish directed credit programmes. In short, liberalise financial markets and let the free market determine the allocation of credit, where it is assumed that there will be a 'free market' with just a few banks, thereby ignoring issues of oligopoly and, of course, of credit rationing type of problems as in Stiglitz and Weiss (1981). With the real rate of interest adjusting to its equilibrium level, at which savings and investment are assumed to be in balance, low yielding investment projects would be eliminated, so that the overall efficiency of investment would be enhanced. Also, as the real rate of interest increases, saving and the total real supply of credit increase, which induce a higher volume of investment. Economic growth would, therefore, be stimulated not only through the increased investment but also due to an increase in the average productivity of capital. Moreover, the effects of lower reserve requirements reinforce the effects of higher saving on the supply of bank lending, whilst the abolition of directed credit programmes would lead to an even more efficient allocation of credit thereby stimulating further the average productivity of capital.

Even though the financial liberalisation thesis encountered increasing scepticism over the years, it nevertheless had a relatively early impact on development policy through the work of the IMF and the World Bank who, perhaps in their traditional role as promoters of what were claimed to be free market conditions, were keen to encourage financial liberalisation policies in developing countries as part of more general reforms or stabilisation programmes. When events following the implementation of financial liberalisation prescriptions did not confirm their theoretical premises, there occurred a revision of the main tenets of the thesis. Initially, the response of the proponents of the financial liberalisation thesis was to argue that where liberalisation failed it was because of the existence of implicit or explicit deposit insurance coupled with inadequate banking supervision and macroeconomic instability (for example, McKinnon, 1988a, 1988b; 1991; Villanueva and Mirakhor, 1990; World Bank, 1989). Those conditions were conducive to excessive risk-taking by the banks, which can lead to `too high' real interest rates, bankruptcies of firms and bank failures. That led to the introduction of new elements into the analysis of the financial liberalisation thesis in the form of preconditions,

which should have to be satisfied before reforms would be contemplated and implemented. The financial liberalization analysis lead to recommendations, which included `adequate banking supervision', aiming to ensure that banks had a well diversified loan portfolio, `macroeconomic stability', which refers to low and stable inflation and a sustainable fiscal deficit, and the sequencing of financial reforms. Gradual financial liberalisation is to be preferred. In this gradual process a `sequencing of financial liberalisation' (for example, Edwards, 1989; McKinnon, 1991) is recommended. Employing credibility arguments, Calvo (1988) and Rodrik (1987) suggest a narrow focus of reforms with financial liberalisation left as last. Successful reform of the real sector came to be seen as a prerequisite to financial reform. Thus, financial repression would have to be maintained during the first stage of economic liberalisation.

A further development took place where another dimension was recognised. This was based on the possibility of different aspects of reform programmes might work at cross-purposes, disrupting the real sector in the process. This is precisely what Sachs (1988) labelled as `competition of instruments'. Such conflict was thought to occur when abrupt increases in interest rates cause the exchange rate to appreciate rapidly thus damaging the real sector. Sequencing becomes important again. It is thus suggested that liberalization of the `foreign' markets should take place after liberalization of domestic financial markets. In this context, proponents suggest caution in `sequencing' in the sense of gradual financial liberalization, emphasizing the required preconditions for successful financial reform. The preconditions include the achievement of stability in the broader macroeconomic environment and adequate bank supervision within which financial reforms were to be undertaken (Cho and Khatkhate, 1989; McKinnon, 1988b; Sachs, 1988; Villanueva and Mirakhor, 1990). It is also argued by the proponents that the authorities should move more aggressively on financial reform in good times and more slowly when borrowers net worth is reduced by negative shocks, such as recessions and losses due to terms of trade (see, also, World Bank, 1989). Caprio et. al. (1994) reviewed the financial reforms in a number of primarily developing countries and concluded that managing the reform process rather than adopting a laissez-faire approach was important, and that sequencing along with the initial conditions in finance and macroeconomic stability were critical elements in implementing successfully financial reforms. All these modifications, however, indicate that there is no doubt that the proponents of the financial liberalisation thesis do not even contemplate abandoning it. No amount of revision has changed the objective of the thesis, which is to pursue the *optimal* path to financial liberalisation, free from any political, i.e. state, intervention.

Still another financial liberalization development is related to the emergence of the ‘new growth’ theory (i.e. the endogenous growth model). This development incorporates the role of financial factors within the framework of new growth theory, with financial intermediation considered as an endogenous process. A two-way causal relationship between financial intermediation and growth is thought to exist. The growth process encourages higher participation in the financial markets, thereby facilitating the establishment and promotion of financial intermediaries. The latter enable a more efficient allocation of funds for investment projects, which promote investment itself and enhance growth (Greenwood and Jovanovic, 1990). Furthermore, in such models financial development can affect growth not only by raising the saving rate but also by raising the amount of saving funneled to investment and/or

raising the social marginal productivity of capital. With few exceptions (for example, Easterly, 1993) the endogenous growth literature views government intervention in the financial system as distortionary and predicts that it has a negative effect on the equilibrium growth rate. Increasing taxes on financial intermediaries is seen as equivalent to taxes on innovative activity, which lowers the equilibrium growth rate. Imposing credit ceilings reduces individual incentives to invest in innovative activity, which retards the growth of the economy (King and Levine, 1993b).

New growth theory suggests that there can be self-sustaining growth without exogenous technical progress. Generally, constant returns to scale at the firm level, with increasing returns overall, are assumed. The efficiency of individual firms, however, is made a function of aggregate capital stock. Capital accumulation triggers a learning process which, being a public good, raises efficiency in the economy. It is possible to show that within this framework financial intermediation can have not only level effects, but also growth effects (Pagano, 1993). In general terms, financial markets enable agents to share both endowment risks (such as health hazards) and rate-of-return risk (such as that due to the volatility of stock returns) through diversification. They channel funds from people who save to those who dissave in the form of consumer credit and mortgage loans. If the loan supply falls short of demand, some households are liquidity-constrained, so that current resources limit their consumption and savings increase. There is, however, an important difference between the financial liberalisation and the endogenous growth theory theses. As Singh (1997) argues, the endogenous growth theory proponents argue for deliberate and fast development of stock markets, especially in developing countries. By contrast, the financial liberalisation advocates view stock market development as either unimportant or at best as a slow evolutionary process (Fry, 1997).

The most recent development includes "*structural* characteristics of finance, such as the relative importance of banks and securities markets and *infrastructural and institutional* prerequisites, such as the legal and informational environment as well as the regulatory style" (Honohan, 2004, pp. 1-2). This discussion has stemmed from the discussion on whether 'financial structure matters'. The well-known debate on bank-based and capital market-based financial systems has recently been followed by empirical investigation that concludes in the negative (Arestis et al., 2004, review these developments). This has led to two further developments that might be termed the 'financial services' view (Levine, 1997; see, also, Arestis et al., 2004), and the finance and law view (La Porta et al, 1998; see, also, Levine, 1999). The financial services view attempts to minimise the importance of the distinction between bank-based and market-based financial systems. It is financial services themselves that are by far more important, than the form of their delivery. In the financial services view, the issue is not the source of finance. It is rather the creation of an environment where financial services are soundly and efficiently provided. The emphasis is on the creation of better functioning banks and markets rather than on the type of financial structure. The evidence produced to support this view is based on panel and cross-section studies, and demonstrates that financial structure is irrelevant to economic growth. However, these multi-country studies are also subject to a number of concerns, summarized in Arestis et al. (2004). Using time series and accounting for heterogeneity of coefficients across countries, it is demonstrated in Arestis et al. (op. cit.) that 'financial structure does matter'. The finance and law view

maintains that the role of the legal system in creating a growth-promoting financial sector, with legal rights and enforcement mechanisms, facilitates both markets and intermediaries. It is, thereby, argued that this is by far a better way of studying financial systems rather than concentrating on bank-based or market-based systems. This view, however, does not quite accord with the facts. For it is the case that while the degree of financial development has changed over the last 100 years or so, legal origins in each country have not changed by muchand by the frequency that the degree of financial development has changed.

We wish to argue in the rest of this paper that there are a number of issues in these arguments, which are critical in the development of the financial liberalisation thesis. We argue that these propositions are not problem-free. They are, in fact, so problematic that they leave the thesis without serious theoretical and empirical foundations.

Problems with Financial Liberalisation

This section summarises briefly a number of critical issues of the financial liberalisation thesis (for more details see Arestis and Demetriades, 1998; Arestis, 2004). They are:

- sequencing;
- causality;
- free banking leads to stability of the financial system;
- financial liberalisation enhances economic growth;
- savings cause of investment;
- absence of serious distributional effects as interest rates change;
- financial liberalization is pro-poor;
- no role for speculation;
- favourable financial policies.

We proceed now to discuss these critical issues briefly.

Sequencing

Sequencing does not salvage the financial liberalisation thesis for the simple reason that it depends on the assumption that financial markets clear, while the goods markets do not. But in the presence of asymmetric information, financial markets too are marred by the so-called imperfections. But even where the `correct' sequencing took place (e.g. Chile), where trade liberalisation had taken place before financial liberalisation, not much success can be reported (Lal, 1987). The opposite is also true, namely that in those cases, like Uraguay, where the `reverse' sequencing took place, financial liberalisation before trade liberalisation, the experience was very much the same as in Chile (Grabel, 1995).

Stiglitz (2000) highlights difficulties with the sequencing literature in explaining the South East Asian crisis. South East Asian countries had very strong macroeconomic fundamentals, along with sound systems of banking regulation and supervision. So that reasonable economic policies and sound financial institutions were in place; high growth rates for long periods with low inflation rates were also evident. Still the South East Asian financial crisis of 1997-1998

was not prevented. Stiglitz (op. cit.) emphasises the destabilizing implications of short-term capital flows to conclude that “there is not only no case for capital market liberalization ….. there is a fairly compelling case *against* full liberalization” (p. 1076). More recent research on sequencing produced similar results. For example, Kaminsky and Schmuckler (2003) when discussing relevant findings conclude that “the ordering of liberalization does not matter in general. Opening the capital account or the stock market first does not have a different effect than opening the domestic financial sector first” (p. 31).

Causality

The difficulty of establishing the link between financial development and economic growth was first identified by Patrick (1966) and further developed by McKinnon (1988a) who argued that: "Although a higher rate of financial growth is positively correlated with successful real growth, Patrick's (1966) problem remains unresolved: What is the cause and what is the effect? Is finance a leading sector in economic development, or does it simply follow growth in real output which is generated elsewhere?" (p. 390).

The relationship between financial development and economic growth is, therefore, a controversial issue, which could be resolved potentially by resorting to theoretical arguments backed up by convincing empirical evidence. A recent attempt to explore this aspect of the debate has been attempted by King and Levine (1993a) who have argued that Schumpeter (1911) may very well have been `right' with the suggestion that financial intermediaries promote economic development. Using data for a number of countries, covering the period 1960 to 1989, they find that "higher levels of financial development are significantly and robustly correlated with faster current and future rates of economic growth, physical capital accumulation and economic efficiency improvements" (op.cit., pp. 717-718). From these results the authors conclude that the link between growth and financial development is not just a contemporaneous correlation and that "finance seems importantly to lead economic growth" (op. cit., p. 730). They, thus, show that the level of financial intermediation is a good predictor of long-run rates of economic growth, capital accumulation and productivity improvements.

It has been shown elsewhere (Arestis and Demetriades, 1997) that although King and Levine (1993a) attempted to tackle in an ingenious way an issue, which has plagued the empirical literature on the relationship between finance and development for a long time, their causal interpretation could be improved further. Once the contemporaneous correlation between the main financial indicator and economic growth has been accounted for, there is no longer any evidence to suggest that financial development helps predict future growth. Furthermore, the cross section nature of the King and Levine (1993a) data set cannot address the question of the link between finance and growth in a satisfactory way. To perform such a task, time series data and a time series approach are required, as for example in Granger (1988) amongst others.

Free Banking Leads to Stability of the Financial System

The underlying assumption of the thesis is that market forces do produce stability in the

banking and financial systems, as they do in other sections of the economy. At the limit, since there would be no possibility of government bailouts in free banking, any hint of imprudence would cause customers to shift to competitors. Consequently, the market discipline would be stronger the larger the number of independent note issuers. We have argued elsewhere (Arestis and Demetriades, 1998) that even in the most frequently discussed cases of free banking, the system may either have worked because of support emanating from outside the system itself, or it was simply marred by serious problems. The upshot is that banking systems should be regulated (Dow, 1996). Further serious theoretical drawbacks, which spring from two sources, *asymmetric information* and *uncertainty*, which are particularly acute in a free banking system.

Asymmetric Information

This drawback originates from the new-Keynesian notions of asymmetric information (see, for example, Stiglitz and Weiss, 1981), which leads to two types of problems: *adverse selection* and *moral hazard*. Adverse selection refers to cases when more creditworthy borrowers are drawn to other means of finance, usually at lower costs, leaving only the lesser creditworthy borrowers for the banking system. The problem here is the unsupported assumption that banks don't have 'absolute' credit standards, but instead are willing to take the best credits from the available customer base to fill out their loan portfolio desires, even if they are very high risk. Moral hazard refers to banks being put in a position where the managers have no risk of loss yet a possibility of gain. For example, an unregulated bank may have a management team that receives a bonus based on profits. It might be to their personal advantage to put some very high risk high yield 5 year securities in the bank's portfolio if they could accrue the interest earned for say 12 months, and be paid bonuses based on the accrued interest, even if the securities had a high risk of subsequent default.

Uncertainty

It can be argued that in the presence of uncertainty in the loan market, changes in the rate of interest alone do not guarantee clearance of the loan market (Basu, 2002). The fact that banks do not maintain a uniform credit standard for all borrowers, more than market imperfections, allows discriminatory lending policy by the banks. Consequently, the variation in access to the loan market for different borrowers is predicated on the credit standard borrowers can offer. Under these circumstances, free banking and liberalization of the loan markets does not guarantee that flexibility in interest rate variation would establish the 'equilibriating' characteristic assumed by the financial liberalization thesis.

Financial Liberalisation Enhances Economic Development

In demonstrating that a positive relationship exists between financial liberalisation and economic development, the thesis under scrutiny ignores a number of aspects, which are of significant importance. We discuss two such aspects: *hedge effects and curb markets* first, followed by the *lack of perfect competition* aspect.

Hedge Effects and Curb Markets

This critique emanates from the structuralist theory (Taylor, 1983; Van Wijnbergen, 1983). It suggests that higher interest rates from financial liberalisation might leave unchanged or, indeed, decrease the total supply of funds. This is due to hedge effects, which may not materialise in which case the total supply of funds may not be affected, or to curb effects, which may reduce it. Hedge effects are due to substitution of hedge assets; gold and land are the most obvious examples, for bank deposits brought about by higher interest rates. However, it should be readily conceded that both the hedge and curb effects have not been unambiguously empirically validated (Ghate, 1992).

Lack of Perfect Competition

The McKinnon and Shaw type of models are based on the unrealistic assumption of perfect competition, which is particularly arbitrary in the case of Less Developed Countries (LDCs). For it is true to argue that perfect competition is 'always and everywhere' unrealistic and impossible in all countries and markets, but especially so perhaps in credit markets. Given, then, that banking sectors are undoubtedly rather oligopolistic, the result of financial liberalisation could very well be the monopoly result whereby the decrease in loans and the increase in the real interest rate are higher magnitudes than that under perfect competition. This result may occur for reasons, which have to do with the possibility of inadequate regulation over banking practices, which leads to undue risk-taking, especially in the presence of deposit insurance. Under such circumstances the banks are beneficiaries of an unfair bet against the government: if the projects they have financed do well they make a lot of profit, if they do badly they rely on the government to rescue them. Such a situation has been termed as `upward financial repression'.

Relationship Between Savings and Investment

In the McKinnon/Shaw model savings precedes investment. But savings can only fund investment, i.e. it can only facilitate the finance of investment. Savings cannot *finance* capital accumulation; this is done by the banking sector, which provides loans for investment without necessitating increases in the volume of deposits. With a credit-creating financial system, it is banks, and not savers, which finance investment. Consequently, it is finance, and not saving, along with entrepreneurial long-term expectations, which are the prerequisites to capital accumulation. Savings, nonetheless, has a different, and important, role to play, which is to achieve and maintain the financial stability of the growing economy (Studart, 1995). A second problem with the McKinnon/Shaw model is the related assumption that deposits create loans. In modern banking systems, including most developing countries, loans create deposits not the other way round.[5]

Interest-Rate Changes and Distribution of Income

The financial liberalisation thesis does not pay much attention to distributional effects of

[5] It is worth noting in the context of the argument in the text that the liquidity preference of the banks is very important (Chick and Dow, 2002), as well as the ability of the banking sector to innovate, with liability management being a good example (Arestis and Howells, 1996).

changes in interest rates. As a result, the contributions initiated on this issue have been rather small, both theoretical and quantitative. Fry (1995) surveys the limited work that has been conducted on this issue, to conclude that "financial repression and the ensuing credit rationing worsen income distribution and increase industrial concentration" (p. 205). Consequently, financial liberalisation and the ensuing freeing of credit markets improves income distribution and decreases industrial concentration, due to widened access to finance and decreased degree of credit market segmentation. This benefits small firms because it avoids subsidising priority sectors, which leads to market segmentation, an obvious characteristic of the financial repression case, which hits them harshly.

There are, however, more important and significant effects, which are ignored by the financial liberalisation thesis. We turn to these effects next.

Pricing: Demand-determined and Cost-determined Sectors

We begin with pricing in the modern economy (Kalecki, 1971). There is the competitive sector, essentially agriculture and raw materials. In this sector prices are determined by supply and demand as in the neoclassical tradition. This is a `demand-determined' price sector. The other sector, which is dominant, is the `cost-determined' price sector, manufacturing and services, where prices are set at some stable mark-up over average variable costs. Prices are, thus, administered on the basis of some expected normal rate of capacity utilisation through a mark-up process over normal average variable costs, sufficient to cover fixed costs, dividends and the internal finance of planned investment expenditures. So that the mark-up is chosen to produce a level of retained profits, after depreciation, interest, and dividend payments, sufficient to provide for the required internal finance as dictated by planned investment expenditure. The price leaders effectively set the market price as just described, so as to yield their target-profits. The rest follow the price leaders and they may have higher or lower average costs and so lower or higher mark-ups and net profits. Interest is a cost and must be passed on if firms are to achieve their profit targets to finance their investment plans. The bigger the size of the firm, the easier it is for it to pass on the increase in interest rates. It follows that increases in interest rates hit the small-sized firms particularly hard. The latter suffer in the same way the `demand-determined' price firms do. They absorb interest rate changes in the case of demand-determined price firms in the short-run. In the long-run interest rate changes may be expected to be passed on in prices if the profit rate is to remain unchanged.

Savings: `Small' and `Big' Firms

There is a further important redistributional effect, which we may discuss by also referring to the distinction between `cost-determined' and `demand-determined' price sectors. An important difference in this respect is that the `demand-determined' price firms, the small firms such as farming and small retailing, save very little; generally, they are net borrowers. Small firms, therefore, are very sensitive to interest rate changes. `Cost-determined' price firms, that is big firms, by contrast, possess a preponderant amount of savings. They prefer to have too much rather than too little savings, which gives them independence from lenders and it enables them to substitute capital for labour, if need be. It is internally created funds, which are utilised

for investment purposes, so that these firms are insulated from capital markets. It follows that high interest rates hit the `small' firms rather harshly, but leave the `big' firms fairly unscathed. The weak, therefore, are victimised. An undesirable distributional effect is thus created which promotes sectoral inequalities. It also retards socially desirable sectors, as for example the case with the housing sector, which has a high propensity to borrow.

Household, Government and Financial Sectors

The extent to which the household sector is affected by interest rate changes depends crucially on the size of their debt/asset ratio. The higher this ratio, the more adversely the household sector will be affected from an increase in the rate of interest. The wealthy receive a large proportion of their income from interest payments but they can also maintain a higher debt/asset ratio too. Similar redistributional effects of increases in interest rates apply in the case of governments. But there is another problem with the government sector. To the extent that their debt/asset ratio incorporates a substantial proportion in foreign debt, global increases in interest rates can have serious redistributional effects across countries. This analysis clearly corroborates Keynes's (1973) argument that increases in interest rates enhance the degree of income inequality substantially. This inequality suggests that monetary policy that aims to sustain high levels of interest rates entails a certain degree of moral responsibility about it. We have argued this for the case of developing economies where in addition to the redistributional issues there is also, in many cases, the awkward problem of external debt. For higher interest rates at a global level are accompanied by an increase in third world debt, which, implies redistributional effects across countries. It is also the case that with financial liberalisation higher income groups are in a better position than lower income groups. The importance of the ethical issues, which arise from this analysis, cannot be exaggerated (Arestis and Demetriades, 1995). It is also for this reason that we would support interest rate policies, which aim at *a stable and permanently low level of interest rates*.

Financial Liberalization is Pro-Poor

The proponents have argued that financial liberalization mobilizes savings and allocates capital to more productive uses, both of which help increase the amount of physical capital and its productivity. Financial liberalization, therefore, increases economic growth, which reduces poverty. Fry (1995), when surveying the limited work on this issue, concludes that "financial repression and the ensuing credit rationing worsen income distribution and increase industrial concentration" (p. 205). By implication, then, financial liberalisation and the ensuing freeing of credit markets improve income distribution and poverty. Nonetheless, one would expect the economic and institutional changes brought about by a financial liberalization package to have a more complex effect on the living conditions of the poor than merely through the presumed growth channel and the simplistic view summarized by Fry (1995). Arestis and Caner (2004) investigate two further channels of interest, in addition to the growth channel to which we have just alluded: the crises channel and the access to credit and financial services channel.

In some countries, financial markets were liberalized prematurely due to a failure to recognize their imperfect characteristics, and in many other cases all those attempts led to financial crises (Arestis and Glickman, 2002). It is possible that the poor might be more severely affected

from such crises. The channel, which we label the crisis channel, works via the changes in the macroeconomic dynamics, increasing volatility and vulnerability to financial crises following liberalization. The second channel proposed in Arestis and Caner (2004) concentrates on the possible changes in poverty caused by better access to credit and financial services that financial liberalization is expected to yield. To the extent that a liberalization program increases the financial resources available to the previously disadvantaged and to the extent that the poverty problem is related to lack of consumption smoothing mechanisms, there is room for financial liberalization to help alleviate poverty. The main conclusion reached in Arestis and Caner (op. cit.) is that there is still no clear understanding of the mechanisms underlying the way moving from financial repression to a liberalized regime influences different segments of the population and, in particular, the poor. A straightforward application of the standard liberalization policies without taking any measures to protect the initially disadvantaged groups of the population from potential losses can worsen the living conditions of these groups.

The Role of Speculation

Financial liberalisation induces two types of speculative pressures: expectations-induced and competition-coerced, both of which contribute to the increased presence of short-term, high-risk speculative transactions in the economy and to the increased vulnerability to financial crises. The first emanate from expectations-induced pressures to pursue speculative transactions in view of the euphoria created by financial liberalisation. Given the proliferation of speculative opportunities, this euphoria rewards those speculators who have short-time horizons and punish the investors with a long-term view. Keynes (1936) in the famous chapter 12 is very sharp-tongued: “As the organisation of investment markets improves, the risk of the predominance of speculation ….. increase ….. Speculators may do no harm as bubbles on a steady stream of enterprise ….. a serious situation can develop ….. when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes the by-product of the activities of a casino, the job is likely to be ill-done ….. It is usually agreed that casinos, in the public interest, be inaccessible and expensive” (p. 158-159; see Arestis et al., 2001, for evidence supportive of these arguments).

The competition-coerced type of pressures emanate from the pressures on non-financial corporations who may feel compelled to enter the financial markets in view of higher returns, induced by financial liberalisation, by borrowing to finance short-term financial speculation. A critical manifestation of this possibility is increasing borrowing to finance short-term financial speculation. Lenders in their turn may feel compelled to provide this type of finance, essentially because of fear of loss of market share (Minsky, 1986). An undesirable implication of these types of pressures is that economies are forced to bear a greater degree of `ambient' risk and thus uncertainty with financial liberalisation than without it (Grabel, 1995). This may very well lead to a reduced volume of real-sector investment (Federer, 1993), while exerting upward pressures on interest rates in view of the higher risk.

The types of speculation just referred to are particularly acute in the case of stock markets. The related developments that have taken place recently and discussed earlier, enhance the importance of speculation in the stock markets. These stock market developments represent a

source of macroeconomic instability in that stock market financial assets are highly liquid and volatile, thus making the financial system more fragile rather than less fragile (Arestis et al., 2001). Consequently, encouraging short-termism at the cost of long-term growth. Financial liberalisation, therefore, is less likely to enhance the long-term growth prospects, especially of developing countries. Additionally, dependence on the external inflows, which have produced the stock market expansion particularly in developing countries, erodes policy autonomy, and, in the case of a fixed exchange rate policy, it forces monetary authorities to maintain high interest rates to sustain investor confidence and greed. There is also the argument that external financial liberalisation may lead to a reduction in the rate of return as a result of increased capital flows which reduces the domestic saving rate. Domestic institutions may face so much competition from foreign institutions, which may cause excessive pressure on domestic institutions and eventually to their bankruptcy.[6]

Financial Policies

A broad literature has established that the financial sector in an economy can be important in determining the average productivity of capital, itself being one of the main channels of economic growth. The screening and monitoring of investment projects, which the financial system routinely engages in, are likely to help boost the efficiency of investment (Pagano, 1993). A growing body of literature demonstrates that the development of the financial system has positive effects on (i) the long-run rate of economic growth or (ii) the volume or efficiency of investment (Fry, 1995). However, the causal nature of this relationship is now known to exhibit considerable variation across countries, which indicates that institutional factors or policies may play a critical role in determining how the process of financial development affects economic growth (Arestis and Demetriades, 1997). The importance of institutional factors is confirmed by Demirgüç-Kunt and Detragiache (1998), who demonstrate that institutional quality is inversely related to the incidence of financial fragility that usually follows episodes of financial liberalisation. The relevance of financial liberalization policies is highlighted by Arestis et al (2002), who demonstrate that the direct effects of financial repression in some developing countries are much larger than, and in some instances opposite to, those emanating from changes in the real interest rate.

Arestis et al. (2003) provide a novel assessment of the effects of several types of financial policies on the average productivity of capital in fourteen countries, including both developed and developing countries. Specifically, they utilize a new data set on financial restraints, capital adequacy requirements and restrictions on capital flows in these countries, for a period of forty years. Modern panel-time series methods are employed to examine the effects of these policies on the productivity of capital, controlling for financial development, employment and capital. Their findings suggest that the effects of these policies vary considerably across countries, probably reflecting institutional differences. They also demonstrate that the main predictions of the financial liberalization literature do not receive adequate empirical support, a result that may reflect the prevalence of financial market imperfections. In contrast, their findings provide significant support to the thesis, currently gaining increasing support among

[6] A relevant study is that of Weller (2001), who concludes that in a number of countries there was a widening gap between credit expansion and industrial expansion after financial liberalization; a result that is interpreted as an indication of more speculative financing.

international policy makers, that some form of financial restraints may indeed have positive effects on economic efficiency. These results are very much within the spirit of Stiglitz's (1998) proposition that "there are a host of regulations, including restrictions on interest rates or lending to certain sectors (such as speculative real estate), that may enhance the stability of the financial system and thereby increase the efficiency of the economy. Although there may be a trade off between short-run efficiency and this stability, the costs of instability are so great that long run gains to the economy more than offset any short term losses" (p. 33).

An interesting aspect that relates closely to this discussion is the distinction between flexible and fixed foreign exchange rates, which has not always featured in the discussion of financial liberalization, and that of policy in particular, as intensely as it deserves. Omitted is the recognition that the core policy of fixed exchange rates and external government debt requires what was deemed as 'financial repressive' policies for purposes of macro economic stability. Financial liberalizing in these circumstances promotes instability. Clearly, 'foreign markets' liberalization implies a freely foreign exchange rate system. But then the discussion often confuses the two systems. It is ignored that under the fixed exchange rate system availability of the reserve currency, however important it may be, is limited, and that interest rates are market determined, while with floating exchange rates banking is not reserve constrained and the interest rate is set by the central bank. This can have clear and significant implications for financial liberalization in general, and financial liberalization policy in particular.

Summary and Conclusions

We have identified in this contribution a number of key theoretical propositions of the financial liberalization thesis, and have suggested that they are marred by serious difficulties. We have also selectively indicated where operative assumptions are flawed and others are omitted. Furthermore, and as we have shown elsewhere (see, for example, Arestis, 2004), the available empirical evidence does not offer much support to the thesis either. Space limitations preclude detailed discussion of the empirical evidence. Suffice to say, though, that in Arestis and Demetriades (1997) and Arestis (2004) we review two types of evidence: experience of individual countries, which went through financial liberalization, and evidence based on econometric investigation. It is clear from this review that no convincing empirical evidence has been provided in support of the propositions of the financial liberalization hypothesis. A recent IMF study (Favara, 2003) fails to establish significant coefficients on financial variables in instrumented growth regressions. Interestingly enough, Rousseau and Wachtel (2001) report that in high inflation countries the possible effects of finance on growth weaken substantially. These contributions add to the unconvincing empirical support of the financial liberalization thesis.

Ultimately, then, Stiglitz (1998) is surely right to suggest that the financial liberalisation thesis is "based on an ideological commitment to an idealised conception of markets that is grounded neither in fact nor in economic theory" (p. 20). Indeed, we would strongly suggest that when financial liberalization is viewed in this way, it falls under the rubric of 'innocent fraud', as used in Galbraith (2004). Namely, the current structure is somehow a 'natural' phenomenon, rather than the direct result of specific laws, institutions, and policies of government. In fact, the mainstream debate begins with assumptions regarding institutional structure that are but

policy options subject to review. Or, as Galbraith (op. cit.) argues, there is "a continuing divergence between approved belief – what I have called elsewhere conventional wisdom – and the reality". Ultimately, and unsurprisingly, though, what really emerges is that "it is the reality that counts" (p. ix). It is precisely these aspects that this paper has attempted to explore.

References

Arestis, P. (2004), "Washington Consensus and Financial Liberalisation", *Journal of Post Keynesian Economics*, Forthcoming.

Arestis, P. and Caner, A. (2004), "Financial Liberalization and Poverty: Channels of Influence", *Working Papers Series No. ???*, Levy Economics Institute of Bard College, Annandale-on-Hudson, New York.

Arestis, P. and Demetriades, O.P. (1995), "The Ethics of Interest Rate Liberalisation in Developing Economies", in S.F. Frowen and F.P. McHugh (eds.), Financial Decision-Making and Moral Responsibility, London: Macmillan.

Arestis, P., Demetriades, O.P. and Luintel, K.B. (2001), "Financial Development and Economic Growth: The Role of Stock Markets", *Journal of Money, Credit and Banking*, 33(1), pp. 16-41.

Arestis, P. and Demetriades, O.P. (1997), "Financial Development and Economic Growth: Assessing the Evidence", *Economic Journal*, 107(442), 783-799.

Arestis, P. and Demetriades, O.P. (1998), "Financial Liberalization: Myth or Reality?", chapter 11 in P. Arestis (ed.), *Method, Theory and Policy in Keynes: Essays in Honour of Paul Davidson, Volume Three*, Cheltenham: Edward Elgar Publishing Limited.

Arestis, P., Demetriades, O.P. and Fattouh, B. (2003), "Financial Policies and the Aggregate Productivity of the Capital Stock", *Eastern Economic Journal*, 29(2), pp. 217-242.

Arestis, P., P. Demetriades, B. Fattouh and K. Mouratidis (2002), "The Impact of Financial Liberalization Policies on Financial Development: Evidence from Developing Economies ", *International Journal of Economics and Finance*, 7(2), pp. 109-121.

Arestis, P. and Glickman, M. (2002), "Financial Crisis in South East Asia: Dispelling Illusion the Minskyan Way", *Cambridge Journal of Economics*, 26(2), pp. 237-260. Reprinted in R.E. Allen (ed.), *The International Library of Writings on the New Global Economy: The Political Economy of Financial Crises*, Edward Elgar Publishing, (2004).

Arestis, P. and Howells, P. (1996), "Theoretical Reflections on Endogenous Money: the Problem with `Convenience Lending`", *Cambridge Journal of Economics*, 20(5), pp. 539-551.

Arestis, P., Luintel, A.D. and Luintel, K.B. (2004), "Does Financial Structure Matter?",

Working Papers Series No. 399, Levy Economics Institute of Bard College, Annandale-on-Hudson, New York.

Bagehot, W. (1873), *Lombard Street: A Description of the Money Market*, London: John Murray.

Basu, S. (2002), *Financial Liberalization and Intervention: A New Analysis of Credit Rationing*, Cheltenham: Edward Elgar Publishing Limited.

Calvo, G. (1988), "Servicing the Public Debt: the Role of Expectations", *American Economic Review*, 78, pp. 647-661.

Caprio, G. Jr., Atiyas, I. and Hanson, J.A. (eds.), (1994), *Financial Reform: Theory and Experience*, Cambridge: Cambridge University Press.

Chick, V. and Dow, S. (2002), "Monetary Policy with Endogenous Money and Liquidity Preference: A Nondualistic Treatment", *Journal of Post Keynesian Economics*, 24(4), 587-607.

Cho, Y-J. and Khatkhate, D. (1989), "Lessons of Financial Liberalisation in Asia: a Comparative Study", *World Bank Discussion Papers*, No. 50.

Demirgüç-Kunt, A. and E. Detragiache (1998), "Financial Liberalisation and Financial Fragility", International Monetary Fund, Working Paper, 98/83.

Dow, C.S. (1996), "Why the Banking System Should be Regulated", *Economic Journal*, 106(436), pp. 698-707.

Easterly, W.R. (1993), "How Much Do Distortions Affect Growth?", *Journal of Monetary Economics*, 32(2), pp. 187-212.

Edwards, S. (1989), "On the Sequencing of Structural Reforms", *Working Paper*, No. 70, OECD Department of Economics and Statistics.

Favara, Giovanni (2003), "An Empirical Assessment of the Relationship Between Finance and Growth", *IMF Working Paper, No. 03/123*, Washington, DC: International Monetary Fund.

Federer, P. (1993), "The Impact of Uncertainty on Aggregate Investment Spending", *Journal of Money, Credit and Banking*, 25(1), pp. 30-45.

Fry, M.J. (1995), *Money, Interest and Banking in Economic Development*, London: John Hopkins University Press.

Fry, M.J. (1997), "In Favour of Financial Liberalisation", *Economic Journal*, 107(442), 754-770.

Galbraith, J.K. (2004), *The Economics of Innocent Fraud: Truth for Our Time*, Boston and New York: Houghton Mifflin Company.

Ghate, P. (1992), "Interaction Between the Formal and Informal Financial Sectors", *World Development*, 20(6), pp. 859-872).

Goldsmith, R.W. (1969), *Financial Structure and Development*, New Haven: Yale University Press.

Grabel, I. (1995), "Speculation-Led Economic Development: A Post-Keynesian Interpretation of Financial Liberalization Programs", *International Review of Applied Economics*, 9(2), pp. 127-149.

Greenwood, J. and Jovanovic, B. (1990), "Financial Development, Growth and the Distribution of Income", *Journal of Political Economy*, 98, 1076-1108.

Honohan, P. (2004), "Financial Development, Growth and Poverty: How Close are the Links", chapter 1 in G.A.E. Goodhart(ed.), *Financial Development and Economic Growth: Explaining the Links*, Basingstoke: Palgrave Macmillan Ltd.

Honohan, P. and Klingebiel, D. (2000), "Controlling Fiscal Costs of Banking Crises", *Mimeo*, Washington, DC: World Bank.

Kalecki, M. (1971), "Costs and Prices", ch. 5 in M. Kalecki (ed.), *Selected Essays on the Dynamics of the Capitalist Economy, 1933-1970*, Cambridge: Cambridge University Press.

Kaminsky, G.L. and Schmuckler, S.L. (2003), "Short-Run Pain, Log-Run Gain: The Effects of Financial Liberalization", *IMF Working Paper WP/03/34*, Washington, DC: International Monetary Fund.

Keynes, J.M. (1930), *A Treatise on Money*, London: Macmillan.

Keynes, J.M. (1936), *The General Theory of Employment, Interest and Money*, London: Macmillan.

Keynes, J.M. (1973), *The General Theory and After, Collected Writings*, Vol. XIV, London: Macmillan.

King, R.G. and Levine, R. (1993a), "Finance and Growth: Schumpeter Might Be Right", *Quarterly Journal of Economics*, VIII, pp. 717-737.

King, R.G. and Levine, R. (1993b), "Finance, Entrepreneurship, and Growth: Theory and Evidence", *Journal of Monetary Economics*, 32(3), pp. 513-542.

Lal, D. (1987), "The Political Economy of Economic Liberalization", *World Bank Economic Review*, 1(2), pp. 273-299.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (1998), “Law and Finance”, *Journal of Political Economy*, 106(6), 1113-1155.

Levine, R. (1997), “Financial Development and Economic Growth: Views and Agenda”, *Journal of Economic Literature*, 35, 688-726.

Levine, R (1999), “Law, Finance, and Economic Growth”, J*ournal of Financial Intermediation*, 8(1-2), 8-35.

Lucas, R.E. (1988), "On the Mechanics of Economic Development", *Journal of Monetary Economics*, 22(1), pp. 3-42.

Minsky, H.P. (1986), *Stabilizing an Unstable Economy*, New Haven: Yale University Press.

McKinnon, R.I. (1973), *Money and Capital in Economic Development*, Washington, DC: Brookings Institution.

McKinnon, R.I. (1988a), "Financial Liberalisation in Retrospect: Interest Rate Policies in LDCs", in G. Ranis and T.P. Schultz (eds.), *The State of Development Economics*, Oxford: Basil Blackwell.

McKinnon, R.I. (1988b), "Financial Liberalisation and Economic Development: a reassessment of Interest-rate Policies in Asia and Latin America", *Occasional Papers*, No. 6, International Centre for Economic Growth.

McKinnon, R. (1991), *The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy*, Baltimore: John Hopkins University Press.

Pagano, M. (1993), "Financial Markets and Growth: An Overview", *European Economic Review*, 37(2-3), pp. 613-622.

Patrick, H.(1966), "Financial Development and Economic Growth in Underdeveloped Countries", *Economic Development and Cultural Change*, 14, pp. 174-189.

Rodrik, D. (1987), "Trade and Capital Account Liberalization in a Keynesian Economy", *Journal of International Economics*, pp. 113-129.

Rousseau, P.L. and Wachtel, P. (2001), “Inflation, Financial Development and Growth”, in T. Negishi, R. Ramachandran and K. Mino (eds.), *Economic Theory, Dynamics and Markets: Essays in Honor of Ryuzo Sato*, Boston: Kluwer, pp. 309-324.

Sachs, J. (1988), "Conditionality, Debt Relief and the Developing Countries' Debt Crisis", in J. Sachs (ed.), *Developing Country Debt and Economic Performance*, Chicago: University of Chicago Press.

Schumpeter, J. (1911), The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and Business Cycle, Cambridge Mass: Harvard University Press.

Shaw, E.S. (1973), *Financial Deepening in Economic Development*, New York: Oxford University Press.

Singh, A. (1997), "Stock Markets, Financial Liberalisation and Economic Development", *Economic Journal*, 107(442), 771-782.

Stiglitz, J.E. (1998), "The Role of the State in Financial Markets", in M. Bruno and B. Pleskovic (eds.), *Proceedings of the World Bank Annual Conference on Development Economics*, Washington, D.C.: World Bank, 19-52.

Stiglitz, J.E. (2000), "Capital Market Liberalization, Economic Growth and Instability", *World Development*, 28(6), 1075-1086.

Stiglitz, J.E. and Weiss, A. (1981), "Credit Rationing in Markets with Imperfect Information", *American Economic Review*, 71(3), pp. 393-410.

Studart, R. (1995), *Investment Finance in Economic Development*, London: Routledge.

Taylor, L. (1983), *Structuralist Macroeconomics: Applicable Models for the Third World*, New York: Basic Books.

Van Wijnbergen, S. (1983), "Interest Rate Management in LDCs", *Journal of Monetary Economics*, 12, pp. 433-52.

Villanueva, D. and Mirakhor, A. (1990), "Interest Rate Policies, Stabilisation and Bank Supervision in Developing Countries: Strategies for Financial Reform", *IMF Working Papers*, WP/90/8.

Weller, C.E. (2001), "Financial Crises After Financial Liberalization: Exceptional Circumstances or Structural Weakness?", *Journal of Development Studies*, 38(1), 98-127.

World Bank (1989), *World Development Report*, Oxford: Ofxord University Press.

Table 1: Estimated Length of Crisis, Gross Output Loss and Recovery Time

		Years	In Percent of GDP
Argentina	1980-82	4	16.6
Argentina	1995-96	3	11.9
Australia	1989	1	0
Brazil	1994	0	1
Bulgaria	1996-97	3	20.4
Chile	1981-88	9	45.5
Colombia	1982-85	5	65.1
Czech Republic	1989	1	0
Ecuador	1996	1	0.9
Egypt	1991-94	5	6.5
Finland	1991-96	7	23.1
France	1994	1	0
Ghana	1982	2	6.6
Hungary	1991-92	3	13.8
Indonesia	1992-present	9	42.3
Indonesia	1997-present	4	33.0
Japan	1992-present	9	27.7
Malaysia	1985-87	4	13.7
Malaysia	1997-present	4	22.8
Mexico	1994	2	9.6
New Zealand	1987-92	7	18.5
Norway	1987-93	8	19.6
Paraguay	1995	1	0
Philippines	1983-86	5	25.7
Philippines	1998-present	3	7.5
Poland	1992	1	0
Senegal	1988	1	0
Slovenia	1992	2	2.1
South Korea	1997-98	3	16.5
Spain	1977	1	0
Sri Lanka	1989-90	3	0.5
Sweden	1991-92	3	6.5
Thailand	1983	2	8.7
Thailand	1997-present	4	31.5
Turkey	1982	1	0
Turkey	1994	2	9.1
United States	1981-82	3	5.4
Urugay	1981-85	6	41.7
Venezuela	1994-96	4	14.1

Source: Honohan and Klingebiel (2000).