The Mahbub Ul Haq Memorial Lecture

Financial Development, Economic Growth, and Poverty Reduction

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The frequent failure of financial liberalisation efforts in developing countries, and the serious damage which recent financial crises have imposed on these economies, have led to renewed attempts to understand the relationships between financial sector development, economic growth and poverty reduction, and to provide a more robust intellectual foundation on which to design efficient and pro-poor financial sector policies for developing countries.

The paper examines the contribution that financial sector development can make to poverty reduction in developing countries. The linkages between financial and economic growth, and between economic growth and poverty reduction, are considered, and some preliminary empirical evidence is presented on these linkages. The paper goes on to argue that financial market imperfections are a key constraint on pro-poor growth, and that public policy directed at the correction of these financial market failures is needed to ensure that financial development contributes effectively to growth and poverty reduction. The final part of the paper examines in some detail the role of financial regulation and supervision policy as a key area for public intervention directed at enhancing the financial sector's contribution to poverty reduction.

INTRODUCTION

There is a longstanding tradition in economics with the issue of financial development and economic growth. Goldsmith (1969) stressed the connection between a country's financial superstructure and its real infrastructure, arguing that the former 'accelerates economic growth and improves economic performance to the extent that it facilitates the migration of funds to the best user i.e. to the place in the economic system where the funds will yield the highest social return' (p. 400). In one of the earliest studies to use cross country empirical analysis, Goldsmith presented data showing a positive trend in the ratio of financial institutions' assets to gross national product for developed and developing countries.

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Author's Note: This paper draws on work undertaken with Martin Brownbridge, on financial regulation issues.

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Fifty years on, development finance again occupies a central position in development economics research and practice. A wave of financial liberalisation in the latter half of the 1980s and early 1990s and a surge of capital inflows to many developing countries, were followed by financial crises in Latin America and East Asia. These events have fostered a fresh research interest in the role of financial intermediation in economic development, and a re-examination of the policy options for ensuring that the financial sector's contribution to economic growth and development is fully realised. The road from the early work on finance and development to where we are now, however, has not been a straight one. Our understanding of the underlying relationships has improved, but remains incomplete. Policy lessons have been learnt, but often on the basis of costly mistakes in previous policy choices and strategic decisions.

In this paper I will review the recent research contributions in the area of finance, growth and development, and will try to uncover what we now know about the contribution that financial sector development can make to poverty reduction. I will focus particularly on the role of public policy in fostering financial sector development, something that was strongly emphasised in the early development economics literature but became marginalised in the market liberalisation orthodoxy of more recent times.

FINANCE AND POVERTY REDUCTION

The International Development Targets (IDTs) agreed by the United Nations membership following a series of summit meetings held by the UN and its specialised agencies over the past ten years or so, commit the international community to achieving sustainable development by the target date of 2015. The IDT for poverty reduction aims to half the proportion of people living in absolute poverty, and will involve reducing the proportion of people living below a dollar a day from 30 percent to 15 percent of the developing world's population.

Can financial sector development contribute to poverty reduction? In the early development economics literature there was, at best, an assumption of an indirect link between financial sector development and a general improvement in the average standard of living, to the extent that financial sector development supported economic growth. But with the failure of economic growth to deliver sustained improvements in the living standards of the poor, this benign-neglect approach to financial sector development (FSD) was replaced by a more negative view of the indirect link between finance and poverty (or, at least, income distribution), based on the perceived failure of government policy towards the financial sector. The financial repression argument blamed excessive government interventions for the emergence of a segmented credit market in which favoured borrowers obtained directed credit at subsidised rates of interest, while less privileged borrowers were forced to seek credit in high cost informal financial markets. Financial liberalisation, widely adopted by developing countries in the 1980s, was intended to lead to financial deepening and better access to credit for previously marginalised borrowers and savers [Gibson and Tsakalotos (1994); Cull (1997)]. The theoretical underpinning for financial liberalisation was provided by McKinnon (1973) and Shaw (1973), who emphasised the influence of real interest rates on savings, investment and hence growth. Ex post assessment of financial liberalisation suggests, however, that the expected improvements in economic growth, increased financial depth and widened access to credit, have not occurred. There is also evidence consistent with the hypothesis that financial liberalisation has led to an increase in financial fragility and systemic crises in developing countries' financial sector.

The financial 'repression' and 'liberalisation' approaches had a common concern with economic growth and resource allocation, with little consideration for the poverty impact, other than in implicit assumption that the benefits of economic growth would 'trickle-down' to the lower income groups.

Micro-finance has been promoted as a means of directly linking finance and poverty reduction. The belief that micro-finance institutions can both alleviate poverty and be financially sustainable has been translated into 'best practice' technologies which have been widely disseminated by the support of the Consultative Group to Assist the Poorest (CGAP) and other key donors. These initiatives have concentrated, however, on the technology of improving access to credit rather than on measuring the impact on poverty and as Mosley and Hulme [(1998), p. 784] note, 'the assumption that improved access to credit will reduce poverty has seldom been tested, with the fact that small loans are being made taken as proof that incomes have increased'. Furthermore, even where micro-finance institutions are successful in helping the poor, these savings and credit services can only reach a tiny proportion of the poor. Providing effective micro-finance services to poor people is part of a poverty-reduction strategy—but only a small part.

Pro-Poor Financial Development

Economic growth is necessary for a sustained and widespread reduction in poverty. The argument that economic growth systematically makes poor people relatively worse off by widening inequalities is not supported by recent empirical evidence which shows that in recent decades, economic growth has on average been as likely to reduce income inequality as to increase it. Even when income inequality has worsened with high growth, the negative effect on the poor has generally been outweighed by the positive impact of growth in raising income levels [Deininger and Squire (1996); Goudie and Ladd (1999)]. The recent study by Dollar and Kraay (2000) based on observations from 80 countries over four decades finds a roughly one to one relationship between overall growth in per capita GDP and percentage changes in the incomes of the poorest 20 percent of the population. The argument that economic growth is necessary for poverty reduction does not mean that policy-makers can limit their attention to the single target of growth maximisation [Lipton and Ravallion (1995)]. The extent to which a given rate of economic growth affects poverty levels is influenced by the institutional structure and policy environment that exists in particular countries. As Goudie and Ladd [(1999), p. 191] note, 'some patterns of growth are more effective than others in reducing poverty, and should be actively fostered. There will be growth patterns that have greater participation of the poor, allowing them to benefit from the growth of the national economy. Hence, for maximum impact on poverty, pro-poor patterns of growth should be promoted'. Pro-poor growth builds on productive use of the assets of the poor, and improved access to markets. Public policies which reduce market imperfections and thereby widen access and enhance the productive endowments and capabilities which poor people need to take advantage of opportunities in a growing market economy, will be key factors in promoting pro-poor growth.

A growing body of theoretical and empirical research has confirmed the view that the development of financial markets and institutions is a critical part of the economic growth process. Stiglitz (1998) likens the financial system to the 'brain' of the economy, performing the function of allocating resources across space and time in an environment of uncertainty. These financial functions of mobilising savings, allocating resources and facilitating risk management contribute to economic growth by supporting capital accumulation and technological innovation.

Cross-country analysis has been used extensively to examine the relationship between financial development and economic growth. The findings in King and Levine (1993) are representative of this body by literature: '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' (pp. 717-18).

The direction of causality between financial sector development and economic growth has long been contested between those who argue that financial development is driven by economic growth, responding to the demands for financial services, and those who maintain that the supply of financial services leads to economic growth. Recent econometric analysis using large, cross-country time series data sets has provided fresh evidence on the linkage between financial development and economic growth [Luintel and Khan (1999); Levine (2000)]. While confirming earlier findings that the causality runs in both directions, the use of more sophisticated econometric methods has allowed research to identify the strength of each uni-directional link. The study by Levine, Loayza and Beck (2000) is representative of this body of literature, concluding that 'both cross section and panel data results tell the same story: financial intermediary development exerts a statistically significant and economically large impact on economic growth'. Additional evidence of the link between financial development and economic performance is found in the adverse impact which financial crises and systemic instability have on the real economy. The total cost of the 59 banking crises in developing countries from 1976–1996, that is, before the East Asia financial crisis, was estimated to be \$250 billion [Caprio and Honohan (1999), p. 44], an average of almost 10 percent of GDP. For the East Asian crisis countries, estimates are in the range 20-55 percent of GDP. The contraction of credit and general deterioration in financial services in turn have an adverse effect on investment decisions and hence on economic growth in the longer run.

The argument so far has been a familiar one and can be briefly summarised. Economic growth is essential for poverty reduction. But policy intervention is needed if economic growth is to deliver increased income and improved economic security to the poor. We also know that financial sector development contributes to economic growth. But the linkage between financial sector development and economic growth will be affected by the efficiency of the financial sector's support to capital accumulation and technological innovation.

Recent research on the determinants of financial sector performance and growth has served to identify the various factors which can influence financial intermediation efficiency and growth-enhancing financial sector development [Levine *et al.* (2000); Barth *et al.* (2000)].

The macroeconomic environment affects the efficiency of the financial sector. Banks are vulnerable, particularly in developing countries, to volatility in terms of trade, exchange rates and interest rates, with macroeconomic shocks contributing to banking crises, with sudden changes in relative prices undermining the value of banks' asset portfolios [Kaminsky and Reinhart (1998); Demirguc-Kunt and Detragiache (1997)]. The institutional characteristics of the financial infrastructure may also contribute to effective financial market functioning. This includes aspects such as the legal framework, information disclosure and availability, and accounting and auditing practices. Levine *et al.* (2000), for example, show that cross-country differences in legal systems and accounting standards help account for cross-country differences in the level of financial development, and argue that legal changes which strengthen creditor rights, contract enforcement and better use of accounting practice, will all contribute to improving financial intermediation and more rapid economic growth.

A major determinant of financial sector performance is the prudential financial regulation and supervision environment within which the financial institutions operate. Recent empirically-based research has begun to devise cross-country indicators of regulatory practices and provides support for the view that the strength of the prudential regulation policy framework has a significant impact on the stability and economic performance of the financial sector [Williamson and Mahar (1998); Lingren, Garcia and Saul (1996); Rossi (1999); Barth, Caprio and Levine (2000); Demirguc-Kunt and Detragiache (1999)].

FINANCIAL REGULATION IN DEVELOPING COUNTRIES

In developing countries, the banks constitute almost the entire financial sector. A strong banking system is therefore the sine qua non for a robust financial sector. Before the 1980s, LDCs did not accord a high priority to the prudential regulation and supervision of their financial systems, for two reasons. First, government policy emphasised economic regulation, such as controls over interest rates and the sectoral allocation of credit, because governments throughout the developing world were keen to use controls over the financial system to promote economic, social and political objectives [Long and Vittas (1992)]. Second, many LDCs, especially those in Sub-Saharan Africa (SSA), had inherited banking and regulatory systems from the colonial era in which the need for supervision by domestic regulators was limited because banks were largely owned by established and reputable foreign banks, were conservatively managed and subject to strict prudential controls from their parent banks [Polizatto (1992)]. However, the fragility which emerged in the financial systems of many LDCs in the 1980s exposed the inadequacy of their prudential systems in the face of changes to the structure of their financial systems, notably in the ownership of banks. Supervisory departments were often grossly understaffed, and focused not on prudential issues but on enforcing economic regulations, such as compliance with foreign exchange controls. The banking laws were outdated and inadequate: for example, they gave supervisors little independence, and minimum capital requirements had often been eroded by inflation to negligible real levels. Many financial institutions (FIs), such as public sector FIs set up by statute, were not subject to banking laws or to supervision by the regulatory authorities [Brownbridge and Harvey (1998); World Bank (1989)].

LDCs began to implement major reforms to their prudential systems in the 1980s and early 1990s. These reforms were in many cases stimulated by the financial crises which had occurred in the 1980s and/or were part of broader programmes of financial sector reforms funded by loans from the World Bank or other multilateral agencies. Conditionalities related to bank regulation and supervision featured prominently in World Bank financial sector adjustment loans, with a higher probability of inclusion than interest rate deregulation, bank privatisation of directed credit reforms [Cull (1997)].

Prudential reforms followed a broadly similar pattern, although the details and scope of the reforms varied between countries. An industrial country (in particular the US) model of regulation and supervision has been adopted by most LDCs. In referring to the regulatory model as US inspired, we are taking account of specific features of the US model, notably the formal regulations and regular on-site bank examinations conducted by the regulators, which distinguish it from the regulatory systems which existed on the continent and in the UK. The UK model was used to be essentially informal and discretionary and did not involve on-site inspections by the regulators, while the continental model did impose legal regulations but relied

upon external auditors rather than public regulators for on-site examination of banks [Polizatto (1992)]. The Basle Committee's Core Principles for Effective Banking Supervision, drawn up in 1997, sets out the basic framework of this model [IMF (1998)]. The model involves a set of detailed prudential regulations, set out in the banking law (e.g. minimum requirements for capital to risk assets, restrictions on banks' asset portfolios including restrictions on large loan exposures and insider lending, auditing requirements etc.), with supervision undertaken directly by a public agency. Supervision entails on-site inspections and off-site monitoring of banks based around the CAMEL principles, in which supervisors evaluate a bank according to its capital asset quality, management, earnings and liquidity [Sheng (1996a)]. Supervisors aim to inspect banks at regular intervals and banks are required to submit regular financial reports to the supervisors. Some, but not all, LDCs have also adopted some type of deposit insurance [Kyei (1995)]. Prudential reforms have also included considerable institutional strengthening, albeit from very low levels of institutional capacity in many cases. Staffing levels have been expanded, training provided for supervisors, and technical advisors provided to supervisory authorities.

WEAKNESSES IN PRUDENTIAL SYSTEMS

Many LDCs suffered banking crises during the mid to late 1990s, often several years after they had begun to implement prudential reforms. There have been three main sources of weakness in the reformed LDC prudential systems. First, some banking legislations still omit important prudential restrictions, or include provisions which are not strict or precise enough. Second, some regulatory authorities lack the requisite personnel to carry out effective supervision. Third, supervisors have been unable, or unwilling, to rigorously enforce the prudential regulations.

In some countries, legislation was not strict or comprehensive enough to deal with problems that emerged in the 1990s. For example, the minimum capital requirements in the legislation enacted by several countries in SSA were set at levels that allowed many undercapitalised banks, lacking adequate financial or managerial resources, to be set up in the 1990s, which subsequently failed as a result of mismanagement and fraud [Brownbridge (1998)].

The East Asian financial crisis exposed a number of regulatory weaknesses in the countries most badly affected by the crisis. Loan classification and provisioning rules were too lenient, especially for secured loans: they were much less stringent than international standards. Consequently, bad debt provisions in East Asian countries were inadequate to provide cover against likely losses, which meant that earnings and capital levels were overstated, and the minimum capital adequacy requirements, which were based on the Basle standard, were rendered meaningless [Brownbridge and Kirkpatrick (1999); Folkerts-Landau *et al.* (1995), pp. 39-40]. The failure of banks to make proper provisions for their non performing assets, either

because the provisioning rules were not strict enough or because the rules were not complied with, has been a problem in many countries besides those in East Asia.

A further omission from the banking regulations in several of the East Asian countries was the absence of restrictions on excessive exposure to high risk sectors, such as real estate. Also, while most of the East Asian countries did impose restrictions on banks' foreign exchange exposures, the regulations did not prevent banks from borrowing in foreign currency and on lending these funds as foreign currency loans to non-traded goods sectors, such as real estate, which were highly vulnerable to a depreciation of the exchange rate. This banks were able to comply with foreign exchange exposure regulations by transferring foreign exchange risk into credit risk which was not adequately restricted by the prudential regulations. Although the banking regulations in East Asia included restrictions on insider lending and large loan exposures, poor accounting standards in several East Asian countries assisted banks to evade these restrictions [Alba et al. (1998); Rahman (1998)]. Finally, many of the non bank financial institutions (NBFIs), such as finance companies in Thailand and merchant banks in Korea, which failed in the 1997-98 crisis had been subject to less strict prudential regulation, and weaker supervision, than banks.

While supervisory capacities have been expanded as a result of prudential reforms, in some countries the demands on supervisors have grown faster than supervisory capacity, because deregulation has allowed a rapid pace of new entry of banks and deposit taking NBFIs. In some countries, where the numbers of banks and/or NBFIs multiplied within the space of a few years (Nigeria in the late 1980s and Indonesia since 1987 are examples), it is difficult to envisage how supervisory capacities could have been expanded quickly enough to keep pace with the growing demand. Moreover, it is the new entrants, which are often small and lack experienced management, that are most in need of close supervision. However, as Caprio (1996) points out, it would take many LDCs five to ten years to train their bank supervisors to the levels of expertise of the industrial countries. The data in Mehran et al. (1998: Appendix Table A4) indicate that, with the exception of Mauritius and Tanzania, the average experience of bank supervisors in SSA countries is between two and five years. The type of skills needed by supervisors are scarce in LDCs and because of financial constraints in the public sector, supervisory departments often struggle to retain skilled staff in the face of competition from the private sector.

The weak enforcement of prudential regulations by the regulators—known as regulatory forbearance—is described by Honohan (1997) as the 'Achilles' heel of any regulatory system'. Regulatory forbearance is often the result of political pressure on the regulatory authorities, who are reluctant to alienate the politicians who appoint and oversee them. It may also be attributable to 'regulatory capture' or result from regulators' fear that disclosure of problems in banks may have adverse

affects on their reputation and career prospects [Boot and Thakor (1993)]. It is, however, difficult to empirically assess the extent of regulatory forbearance because much of the actual practice of bank supervision is not publicly observable, given that a degree of confidentiality is essential to maintaining public confidence in the banking system and the trust of the bankers. In many cases the extent of regulatory forbearance only becomes apparent after major bank failures occur, and information on the events leading up to the failure is made public.

Regulatory forbearance takes a number of forms, for example, regulators may not strictly enforce loan classification requirements or loan exposure limits, but it becomes particularly crucial when regulators have to deal with distressed banks. Regulators often face strong pressures to delay taking action, especially when this involves closing a bank because the political costs of bank closures may be high. The mechanisms for dealing with distressed banks set out in banking legislation often lack precision and clarity, with regulators given too much discretion: this was an important weakness in the prudential legislation of many of the East Asian crisis countries. Intervention policy is, as a consequence, often determined on an ad hoc basis, which exposes the supervisors to pressure to exercise forbearance. Consequently, distressed banks are often allowed more time and liquidity support from the Central Bank in the hope that they can resolve their financial distress. A mutual dependence between the regulators and the distressed bank may then develop, whereby the distressed bank requires more finance to remain liquid while it becomes increasingly difficult for regulators to close the bank and realise the losses at the expense of the taxpayer [Glaessner and Mas (1995)]. Moreover, distressed banks have fewer incentives for prudent management as they have little, if any, capital left to lose. Instead bank owners have incentives to 'gamble for resurrection' with what is left of their deposits and the liquidity support they are able to obtain from authorities. The result is often an escalation of losses in what have been dubbed 'zombie banks'; banks which are insolvent but remain open with liquidity support from the authorities [Kane (1989)]. Regulatory forbearance worsens moral hazard since, if regulators acquire a reputation for forbearance, bank owners and managers will have less reason to fear that imprudent management will be penalised, and therefore will be less constrained in taking imprudent risks.

Although weak implementation of prudential reforms clearly accounts for some of the deficiencies which still afflict the prudential systems of LDCs, there must also be doubts over whether a regulatory model designed for advanced economies is optimal for LDCs [Caprio (1996, 1997)]. Caprio points out that the high incidence of banking crisis in industrialised countries does not necessarily suggest that their regulatory methodology should be regarded as 'international best practice', and argues that it is unrealistic to expect supervision to act as the first line of defence against bank failures in LDCs given the constraints which supervisors face in these countries: e.g. severe scarcities of the requisite skills, the length of time needed to train supervisors, political interference and weak accounting and legal frameworks. The industrial country regulatory model is highly intensive in the use of reliable financial information and professional supervisory capacities, both of which are in short supply in most LDCs. It also relies upon a regulator which can enforce prudential regulations consistently and impartially, whereas in many LDCs regulators have neither the incentives nor the political independence to do this.

A further drawback of the industrial country model of prudential regulation for LDCs is its complexity in that it comprises many different components which depend for their effectiveness upon other components of the model also working properly: in other words, the different components do not stand alone, but form part of an interlocking system. If one part of the system fails, the effectiveness of the whole system is impaired. The capital adequacy requirement, for example, which is a central component of the model, is not effective as a prudential tool unless banks accurately value their assets. This in turn requires that proper accounting rules must be in place and that regulators, or external auditors, have the capacities to evaluate the condition of banks' asset portfolios and the adequacy of their loan loss provisions. Restrictions on risk taking, such as limits on insider lending, are also ineffective if regulators do not have sufficient supervisory capacity to examine banks' portfolios and detect infringements. In some LDCs, gross violations of the banking laws, such as insider lending amounting to a multiple of the statutory limit, have not been detected by regulators, or by external auditors, until after a bank has been closed.

Making Prudential Regulation in Developing Countries More Effective

A range of proposals and approaches have been advocated in the literature for making prudential regulation more effective in developing countries [Caprio and Honohan (1999); Honohan and Stiglitz (1999); Murshed and Subagjo (2000); Brownbridge and Kirkpatrick (2000)].

One approach involves building upon the model for prudential regulation currently in place in most LDCs, by enacting reforms to introduce regulations covering types of risk not adequately covered in the existing regulations, by making regulations more stringent where appropriate to take account of the prevailing conditions in LDCs' financial markets, and by further institutional strengthening of supervisory authorities. Other approaches involve some reversal of financial liberalisation in order to restrain competition in banking markets, while others would seek greater reliance on market based solutions. The approaches are not entirely mutually exclusive.

Strengthening Capital Requirements

As noted above, most LDCs have adopted bank capital requirements based on the Basle Capital Accord. Dziobeck, Frecaut and Nieto (1995) argue that stricter capital regulations are needed in LDCs because the risks facing their banking systems are greater than in the industrialised countries as a result of a less stable economic environment and less developed financial infrastructures. LDCs should, therefore, consider adopting higher minimum capital adequacy requirements than the 8 percent of risk adjusted assets specified in the Basle Accord. Singapore and Argentina have adopted capital adequacy requirements of 12 percent and 11.5 percent respectively. Moreover, other elements of the capital adequacy requirement need to be reviewed. For example, the risk weights given to different types of loans are based on observed default probabilities in industrialised countries, which may be too low if applied to LDCs.

Higher capital requirements cannot compensate however, for deficiencies in other prudential norms, such as inadequate provisioning. Furthermore, bank capital in LDCs is often elastic and of poor quality because bank owners are able to finance their equity holdings by borrowing from their own bank, hence in such cases raising capital requirements would neither reduce incentives for risk taking nor provide a buffer against losses [Goodhart *et al.* (1998), pp. 107-8]. Even if capital adequacy standards could be effectively enforced, some models of banking behaviour suggest that in some circumstances raising regulatory capital requirements may be ineffective in reducing risk taking on the part of banks or may even induce greater risk taking [Bhattacharya and Thakor (1992); Gilbert (1991)].

Tighter Lending Restrictions

Rapid credit growth in the mid-1990s characterised the East Asian financial systems hit by the 1997-98 crisis. Over rapid expansion of lending banks is often a cause of poor asset quality because the growth of lending may outstrip the lender's capacity to appraise and monitor its borrowers and also because more marginal borrowers are likely to be brought into the credit market, but prudential regulations in most countries do not place restrictions on credit growth, other than indirectly through the capital adequacy requirement. Honohan [(1997), p. 21] advocates 'speed limits' to restrict the rate of growth of banks' loan portfolios. He envisages that these would be used in markets with many new and inexperienced entrants, or to dampen a credit boom, but does not envisage their use as a tool of regulation on a permanent basis. Speed limits need not necessarily be applied to the entire loan portfolio, but could be restricted to the types of lending, such as real estate or foreign currency loans, which are regarded as posing the greatest risk to banks' financial soundness and which often grow rapidly after financial liberalisation. LDCs should also impose very strict limits on insider lending.

Financial Restraint

Hellman, Murdock and Stiglitz (1998) advocate deposit rate controls as a tool of prudential policy. They contend that the increased competition induced by

financial liberalisation has contributed to financial fragility because it reduces banks' franchise values and thus incentives for prudent bank management. They model a banking market with freely determined deposit rates of interest in which, although raising capital requirements can induce more prudent bank management, this is not Pareto efficient because banks are compelled to hold an inefficiently large amount of capital. Even a market without deposit insurance and with perfect monitoring by depositors may still be subject to moral hazard if deposit rates are freely determined, because there exist equilibria where banks have an incentive to gamble and can still attract deposits by paying higher deposit rates. In their model an efficient Pareto outcome can be induced through a combination of deposit rate controls as part of a wider strategy of regulations, including restrictions on entry into banking markets, which create rents for banks and which they term 'financial restraint'. These rents enhance the franchise value of banks, thereby encouraging more prudent bank management, as well as encouraging greater deposit mobilisation by banks.

Intervention Rules

To prevent regulatory forbearance, Glaessner and Mas (1995) advocate institutionalising intervention policy in a clear set of publicly announced rules which would limit the discretion of the regulators. An example of such rules is the US Prompt Correction Action (PCA) regulations, which specify graduated intervention by the regulators triggered by thresholds linked to capital adequacy. The PCA regulations are derived from the concept of 'structured early intervention and resolution' and attempt to imitate the remedial actions which private bondholders would impose on debtors, in the absence of any government insurance or guarantees [Goldstein and Turner (1996), p. 51]. The value of PCA regulations is threefold. First, PCA forces regulators to intervene in a distressed bank before the level of distress becomes severe. Hence the chances of successfully resolving the distress are higher than if intervention were to be delayed until the financial condition of the bank had worsened. Second, PCA regulations impose a legal requirement on the regulators to take specified actions and thus improve incentives on regulators to intervene promptly. They also provide regulators with a defence against political pressure for forbearance. Third, by making PCA regulations part of the banking law, bank owners and managers will have less reason to believe that regulators will exercise forbearance in the event that their bank becomes distressed i.e. the existence of rules will enhance the credibility of the regulators as enforcers of the regulations. This will therefore improve incentives for prudent bank management.

There are, however, practical difficulties with implementing PCA rules in LDCs. Defining robust intervention rules may be difficult. The capital adequacy thresholds used in the US may not convene useful information about the true financial condition of a bank in an LDC because, as discussed above, an insolvent or capital impaired bank can still produce a balance sheet showing that it is well

capitalised if it fails to classify its non performing loans accurately and make appropriate provisions. Regulators may not know that a bank has crossed an intervention threshold until long after the event, by which time it may already be insolvent. In addition, however strong the regulator's commitment may be, *ex ante*, to enforcing intervention rules, such rules are time inconsistent in that, when faced with a major bank failure, governments often face very strong incentives to ignore the rules and bail out the bank rather than close it down. For example, in the mid-1970s the Chilean authorities repeatedly stated that they would not bail out insolvent banks but did so in 1977, when a large bank ran into trouble, because they feared the impact of its insolvency on the confidence of depositors and external creditors in the country's financial system [Diaz-Alejandro (1985)].

While acknowledging that allowing regulators discretion can lead to excessive forbearance, Enoch, Stella and Khamis (1997) argue that discretion and ambiguity by regulators in the operation of lender of last resort (LOLR) facilities do have some value. As noted above, it may not always be possible, or optimal, to enforce intervention riles, such as when a bank is 'too big to fail', in which case the rules lose their credibility. A rule-driven intervention policy could penalise bank management for problems, such as those arising from macroeconomic shocks, for which they are not responsible [Dewatripont and Tirole (1994), pp. 220-21]. Furthermore it may not be desirable to publicly reveal that a bank has received assistance from the authorities because it might undermine public confidence in that bank. Enoch, Stella and Khamis distinguish between ex ante and ex post transparency, and argue that some *ex ante* discretion in the operation of LOLR facilities, balanced by sanctions on those who are responsible for the bank's distress, should be combined with ex post transparency in which the regulators would have to make full disclosure of their intervention (e.g. why, and how much, finance was provided? what were the results?) to the public.

Autonomy and Accountability of the Regulators

Enhancing the legal autonomy of the regulators from Government may also help to insulate the regulators from pressure to exercise forbearance, but it is unlikely to be a panacea in countries where the legal framework is weak, and hence nominally legally independent central bankers may have little protection in practise from political interference, as well as for the reasons noted above (e.g. regulators can be 'captured' by the regulated). Kane (1997) argues that it is the ability of government agents to conceal information from, and resist accountability to, the public which lies at the heart of many principal agent problems in this area. As such, it is essential to make 'the costs generated by regulatory forbearance observable so that regulators can be disciplined in the press and in the labour market for post government employment' (p. 72). How this could best be achieved will depend upon the specific institutional characteristics of different LDCs: for example, in countries which have independent minded parliamentarians, bank regulators could be required to submit a detailed annual report on their activities, including the details of support given to banks and compliance with banking laws.

Market-based Approaches to Regulation

A market based approach to prudential regulations is advocated by Calomiris (1997) who doubts whether Government supervisors have the skill or incentives to identify losses incurred by banks as diligently as would private sector agents with their own money at risk. Calomiris suggests imposing a requirement that banks finance a minimum percentage of their assets with subordinated and uninsured debt carrying a yield capped at a maximum rate above the riskless market rate. To mobilise subordinated debt with a capped yield, banks would have to convince private subordinated debt holders that the quality of the bank's asset portfolio and capital was adequate to justify providing such credit. Subordinated debt holders would have incentives to monitor the bank, and the threat of a run by informed debt holders would mitigate moral hazard on the part of banks. Argentina introduced a requirement that banks should finance 2 percent of total deposits in the form of subordinated debt, although without a maximum yield, in 1996 [Calomiris (1997), p. 36]. However, this solution is unlikely to be feasible in low income LDCs because capital markets are very poorly developed, accounting standards are low and the veracity of audited accounts is unreliable, hence many banks would have great difficulty in mobilising subordinated debt from genuine private investors irrespective of the quality of their asset portfolio. Even if it were feasible, monitoring by individual creditors would not normally be socially efficient, because monitoring involves positive externalities. Furthermore, if a bank is insolvent or close to insolvency, uninsured subordinated debt takes on characteristics which are similar to those of equity capital, and consequently, subordinated debt holders have suboptimal incentives to impose conservative management on the bank to protect its deposits [Dewatripont and Tirole (1994), p. 219].

Another approach which utilises the market is to increase disclosure requirements of banks' financial condition and require banks to obtain credit ratings from private agencies on a regular basis. But enhanced disclosure requirements are unlikely to have an impact on banks' risk taking if bank liabilities are all implicitly insured. Both Chile and Argentina have enhanced disclosure requirements and provide less than full insurance for banks' liabilities. Argentina requires banks to make their balance sheet data publicly available on a monthly basis, requires quarterly external audits of banks, and requires banks to obtain ratings from two established private credit rating agencies [Calomiris (1997); IMF (1998a), p. 161]. However, enhancing disclosure requirements in countries in which accounting standards are weak and audited accounts are unreliable is likely to have limited value. Even in countries with reliable accounting and auditing standards, the

efficacy of disclosure requirements as an instrument to facilitate monitoring of banks by their depositors is limited. The acquisition and use of private information about borrowers, in a manner which is not feasible for depositors, provides one of the key rationales for banks as financial intermediaries. The type of information which banks use to appraise their own borrowers is not publicly observable or verifiable [Marquardt (1987), pp. 20-22]. Borrowers seek loans from banks partly because they cannot credibly transmit information about their risk profiles directly to savers. If this were possible, the borrowers would raise funds more cheaply directly from capital markets.

LDCs have made substantial efforts to strengthen their prudential systems. Most now have at least the basic framework of banking laws in place and are able to carry out bank supervision. This is a major improvement on the situation in the 1980s, when in many countries very little prudential supervision actually took place and the banking laws were outdated and deficient. Nevertheless, there are still many weaknesses in LDCs' prudential systems. These weaknesses include loopholes in the prudential regulations (which in principle should not be difficult to rectify), lack of adequately skilled staff and regulatory forbearance. The latter two constraints reflect more fundamental problems in LDCs, notably the scarcities of human capital, especially in the public sector, and the difficulties in establishing efficient and impartial rules-based public administration insulated from political interference.

Given these constraints, it is not yet clear whether the developed country model of bank regulation, based on the imposition of detailed formal regulations and which makes strong demands on both information, supervisory skills and the independence and objectivity of regulators, can be made to work effectively in LDCs. The option of relying more on market based monitoring of banks does not appear to be feasible in low income LDCs because the private agents and capital markets which are needed to undertake monitoring are themselves very poorly developed and because private sector monitoring is also constrained by the lack of reliable financial information.

A number of interesting proposals for improving systems have been put forward, mainly involving incremental changes to the industrial country model, although as yet the efficacy of these ideas in LDCs is largely unproven. If prudential reforms are to be effective in the conditions prevailing in LDCs, they need to be relatively simple, robust in terms of not being highly dependent upon other components of the prudential system working well, and easy to verify and enforce.

Prudential reforms which could satisfy some or all of these criteria include adopting very strict bank licensing criteria with high entry requirements relating to minimum capital and the expertise and integrity of bank owners, directors and managers, raising minimum capital adequacy ratios above the minimum levels set out in the Basle Capital Accord, imposing very stringent restrictions on insider lending, and allowing regulators the discretion to imposing speed limits on growth of credit to high risk sectors. Governments should avoid exacerbating moral hazard, by limiting depositor insurance to small deposits only. Because regulatory forbearance is a major weakness in many LDCs, it is essential that future reforms strengthen the incentives on the regulators for effective supervision and enforcement of the prudential regulations at all stages of the regulatory process. The introduction of prompt corrective action rules, which mandate intervention by the regulators in distressed banks when predetermined thresholds are crossed, could help to reduce regulatory forbearance. PCA rules should be combined with measures which give regulators greater effective independence from political interference and which also strengthen *ex post* requirements for disclosure of regulatory actions and accountability of the regulators.

The recent history of financial crises in developing countries has clearly shown the critical importance of sound regulation and supervision, as a means of defending financial systems against distress and disorder, and the economic and social resulting from financial instability. It is also clear that the appropriate regulation of financial markets is complex, and needs to recognise an economy's structural characteristics, stage of development, and institutional capacities.

CONCLUSION

This paper has concentrated on the contribution that financial sector development can make to economic growth and poverty reduction in developing countries. In particular, we have argued that robust prudential regulation of financial institutions is a necessary condition for stable and efficient financial sector development.

It is not being suggested, however, that prudential regulation is all that is needed to achieve a significant reduction in poverty. The limitations of the analysis need to be recognised. First, the causes of economic growth are multiple and interrelated, and our understanding of the way in which financial intermediation interacts with the other factors contributing to economic growth is still incomplete [Temple (1999); Luintel and Khan (1999)]. Second, the measure of poverty we have used is crude, measuring the prevalence of poverty by the headcount index, i.e. the number of people whose standard of living is below the absolute poverty line. The measure does not allow for any changes that occur below the poverty line, where, for example, the remaining poor become poorer. There will continue to be a need for safety nets and other forms of social protection, including financial services, to assist those poor people who lack the capabilities and endowments to take advantage of improved opportunities in a growing economy. Third, we have not discussed the fragmented character of the formal financial sector in many developing countries, where, for example, legally registered microfinance institutions operate outside the regulation of the financial authorities [CGAP (2000); Christen and Rosenberg (2000)].

Much more research is needed to advance our understanding of the crucial issues of financial development, economic growth and poverty reduction. The Institute for Development Policy and Management at the University of Manchester is engaging with this research agenda, through three separate research programmes, supported by the UK Department for International Development (DFID)—the Finance and Development Research Programme; the Research Centre for Regulation and Competition; and the Research Centre for Chronic Poverty and Development. All three programmes are seeking to work in partnership with developing country research institutions and individual researchers, and would welcome the opportunity of collaborating with the Pakistan Society of Development Economists.

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Comments

1.

This is an extensive paper with the ambitious objectives to "review the recent research contributions in the areas of finance, growth and development" and to "try to uncover what we know the contribution that financial sector development can make to poverty reduction". Although these are difficult questions with complex synergies not fully understood, especially in the present environment of global interdependence, the author has made credible inroads and interesting insights into the field.

The logic of the arguments presented and the conclusions drawn may be summarised as follows. A direct link between finance and poverty reduction was not easy to establish. Even in the case of the over-publicised area of micro finance, promoted as "a mean of directly linking finance and poverty reduction," it is found to have concentrated on the technologies of improving access to credit rather than in measuring the impact on poverty. As the author rightly observed, improved access does not necessarily lead to poverty reduction. We may add that even then, the reach of micro finance is limited and its activities are mostly subsidised. Accordingly, the paper turns to investigate indirect links between finance and poverty reduction.

The most obvious candidate is growth. There is enough evidence that indicate that growth 'facilitates' poverty reduction. Also, there is no reason to be concerned about the 'Kuznets' lag between growth and reduction in inequality. Recent evidence indicates that growth does not necessarily increase inequality in the initial stages. The Kuznets curve is not inevitable, although policy measures are required *if* economic growth is to deliver increased income and improved economic security to the poor. Thus the circle of the argument is closed if it is proved that there is a positive relation between financial sector development and economic growth. The author provides enough evidence to that effect and goes further to indicate that it is the weak financial sector performance that is responsible for the presence of weak positive synergies.

The rest of the paper focuses on policies and programmes to enhance prudential reform of the financial sector especially in the developing countries. Meanwhile, policies required to rehabilitate micro finance, and more fundamental, those required for economic growth to improve income levels and economic security of the poor are left aside, probably because of lack of conceptual or empirical evidence.

The extensive review of empirical evidence on prudential reform in the banking systems indicates the presence of serious weaknesses and the need for fundamental prudential reform specially in the developing countries. These conclusions led to detailed policy recommendations. Comments

The logic of the argument and its conclusions, thus far, are clear but, I am afraid, suffer from apparently serious omissions, beyond those already mentioned, that influence the conclusions and recommendations. What is of concern is the implied assumption that prudential reform will lead to financial sector stability, essential for stable economic growth and accordingly poverty reduction. This is not necessarily the case in the present global environment. There is evidence that financial sectors around the world have been exposed to new types of local and global risk and a higher degree of potential failure. As discussed in Eatwell and Taylor (2000), these risks may not be alleviated by traditional prudential reforms on the local or national levels, or even by the present international regulatory agencies, e.g., the IMF, the European Central Bank or the Exchange Rate Mechanism (ERM) of the European Monetary System. [See also Sirageldin and Serageldin (2001)].

The present international financial system is becoming highly complex and interdependent with many new technical innovations. This new financial environment started at the time when the USA abolished the Gold standard in the early 1970s and effectively started the process of the privatisation of financial risk. For the past three decades, financial institutions developed built-in instabilities with serious systemic risk that because of its contagious nature impact the performance of individual and collective financial institutions, regardless of their prudential behavior as well as national economic performance regardless of the quality of its fundamentals. The impact on growth and poverty reduction could be sizable as illustrated by the case of East Asia in the late 1990s and Turkey at the present time. These are critical issues that require attention to supplement the authors commendable survey and extensive agenda.

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Sirageldin, I., and S. Serageldin (2001) Global Interdependence, Privatisation of Risk and Human Insecurity. Forthcoming in UNESCO Encyclopedia of Life Support Systems (EOLSS). Paris–London: UNESCO - EOLSS. (a) I have read this paper with interest and benefited from the views expressed in it. Prof. Kirkpatrick has underlined the importance of the role of Financial Market in Economic Growth and its consequent impact on Poverty Reduction in LDCs.

The paper reports the empirical evidence that "higher levels of financial development are significantly correlated with faster economic growth, physical capital accumulation and economic efficiency improvements" (p. 5).

- (b) It is fairly well known that financial sector development contributes to economic growth provided the financial sector supports capital accumulation and technological innovation.
- (c) The author hypothesises that greater economic benefit would accrue from 'regulated' rather than 'liberal' financial markets, that it would help avoid financial crises like that of 1980s' and 1990s, and also be instrumental in poverty reduction in the LDCs.
- (d) He also says that "financial liberalisation has led to an increase in financial fragility and systematic crises in developing countries" financial sector" (p. 3). Therefore, it seems appropriate to follow prudential regulations like those prevalent in the USA and that rigorous implementation of Prudential Regulations will discipline the domestic financial markets leading to ultimate poverty reduction.
- (e) In hindsight, one can say with confidence that adopting the US model of prudential systems for banks, without modifications, for LDC's was inappropriate as is clear from what happened later on to banks in 1990s. One may ask: could the weaknesses identified in this paper been avoided? Why were these weaknesses/possible consequences not spotted earlier? Are these 'weaknesses' found only when the model is applied to the LDC's or do they exist as loop-holes when the model is used in the more developed countries? Besides, the high incidence of banking crisis in industrialised countries also suggests that their 'regulatory' methodology should not be regarded as "international best practice".
- (f) Is it possible that these very factors such as 'overstated capital levels' 'insufficient covering for losses in the belief that they would not happen' actually lead to the phenomenal East-Asian growth before? After all, the same 'liberal' financial system had been in place when growth rates were around 7 to 11 percent? So if the regulations allowed economic growth at that time why did the bubble burst later? And secondly, what role did world

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financial system play in the financial crisis faced by the East Asian countries?

- (g) It is fairly well known that the Prudential Regulations lay down the required ratios between the liabilities and the capital and between risk assets and the capital to ensure good financial health of the financial institutions which maybe able to absorb any possible bad debts or the extended troughs in the business cycle. The Prudential Regulations also lay down the criteria for asset evaluation and prudence required in making investment.
- (h) Strict adherence to Prudential Regulations will thus reduce the incidence of failure of the financial institutions and will eliminate the instability and political repercussions such an event may cause.
 - Now the correlation between Prudential Regulations and Poverty Alleviation maybe present due to their salutary effect on the economic climate, but it is very weak and remote.
- (i) One may ask: Will putting down too many regulations actually lead to financial repression and thus break the chain of economic growth and poverty alleviation? Hindsight is always 20-20 and it is easier after the East-Asian crises to say 'oh that is why it happened', so let us control every factor which might have been responsible! Sounds more like finding a scape goat rather than setting up a better financial system.
- (j) Regulatory forbearance issue also deserves further analysis. If the "Zombie" banks cannot be resurrected, is supervisor the best person to try and play it safe? Let the central bank decide, because bank closures have far reaching effects, political and economic. The supervisor should not be making this decision in the first place.
- (k) Moreover, though increasing Capital Requirements will strengthen the bank, but will this not limit the amount of money available for 'lending' and thus, from an overall all viewpoint, decrease the amount of capital available in the market for economic growth and hence lead to increase in poverty.
- (1) A better regulation would be to ensure that the banking system is able to appropriately manage it's capital rather than hang on to *more* for "just-in-case" situations.

Tighter lending restrictions are liable to cause the small-borrower to loose out more, as the bank will tend to lend to those who can provide securities, leaving out those who cannot i.e. the poor. That would defeat the idea of poverty reduction.

(m) 'Speed limit' for sectors may also effect micro-financing, which seems to bring some good results. Even with where/when to apply speed limits, this sort of control will dampen the prospects of investment available to an entrepreneur.

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- (n) The provision of micro credit in Bangladesh has been instrumental in poverty alleviation even though provision of such loans without adequate collateral would be considered a violation of Prudential Regulations.
- (o) So much so that banks are finding investment even in the Information Technology sector very risky despite the fact that this market has great growth potential. The obvious problem in this case is that computer machine looses its value very fast and the assets are depreciated at a rate that are unacceptable by prudential regulation criteria. So what options are open to LDC banks in a situation of conflicting interests: follow the prudential regulations or take the investment opportunities?
- (p) Acceptance of author's recommendations will also create a serious dilemma for the managers of economy: how to choose a good mix of free flow of finance for investment for all sectors without invoking the restrictions linked to prudential regulations. Any policy decision in such circumstances will be tedious exercise, thus fraught with economic risks.
- (q) Over all, with the regulations being suggested, the chances for improving the banking system will improve, but the adverse effects of these regulations will tend to be on the poor than the rich. A typical LDC bank having to work with such regulations may become biased in favour of his rich customers rather than cater to the small borrowers. That would defeat the entire purpose of poverty alleviation.
- (r) If the banks are more regulated, and 'liberalisation' dampened in favour of 'stability', then that too is a contribution towards economic growth, but this growth may lead to income inequality rather than poverty elevation. The author has made some good recommendations for improved banking in LDCs, but how this will lead towards poverty elevation is unclear.
- (s) "Pro-poor" financial development sounds great, but how do you actually make it work? The paper says that income inequality has worsened. If you have public policy to remove market imperfections, does that not first give more opportunity to those above the poverty line than those below? Market imperfections cannot disappear in a short period and so the time it takes for them to be removed will (probably) increase the rich-poor gap further.
- (t) Besides, it is difficult to see lack of access to markets as the only major reason for the poor being poor. There are many other factors involved in this problem.

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