

# Getting the Domestic Financial Architecture Right

Presented by

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## ***Introduction***

The Asian Crisis of 1997-98 highlights the importance of the financial sector to development. The loss of wealth and income that followed in its wake underscored the nexus between robust financial systems and the reduction in poverty that is expected to accompany economic growth and development. That crisis, which capped those of the past two decades by its widespread domestic and international contagion, catapulted the architecture of the international financial system, and by implication that of the domestic system, to a position of prominence on the agenda of international economic issues. It also demonstrated flaws in the Shaw-McKinnon<sup>1</sup> thesis of financial liberalisation that was incorporated into the Washington consensus and that was accompanied by financial sector crises in developing countries during the decade of the 1980s and 1990s. The attention given to the financial architecture is intended to make the system more robust and less prone to crisis and to ensure that financial intermediation supports steady growth and development. The initial concern with financial architecture has been with the international financial system but since the international system includes a linked network of domestic financial systems, it was inevitable that the architecture of domestic financial systems would also come under scrutiny.

This paper examines the reforms of the domestic financial system in developing countries. It makes the case that developing countries must continue to strengthen their prudential regulation and supervision of the financial system or face endemic crises that will wipe out the gains in poverty reduction. The paper is divided into four sections; the first examines the relation between the development of the financial sector and economic growth and the second reviews the structure of the financial systems in developing countries; section three reviews prudential regulation in developing countries and section four sets out what must be done to make the system work as intended.

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<sup>1</sup> **McKinnon, Robert I.:** *Money and Capital in Economic Development*, Washington DC, Brookings Institute, 1973, *Financial Liberalisation and Economic Development: A Reassessment of Interest Rate Policies in Asia and Latin America*, San Francisco: International Center for Economic Growth, 1988 and "Financial Liberalisation in Retrospect: Interest rate Policies in LDCs" in G. Ranis and T.R. Schultz: *The State of Development Economics*, New York, Basil Blackwell, 1988; **Shaw, Edward S.:** *Financial Deepening in Economic Development*, New York, Oxford University Press 1973.

## ***I. The Financial System and Economic Growth***

Empirical investigations have established a robust link between the evolution of the financial system and economic growth and development<sup>2</sup>. As Schmidt and Wrinkler observed “the positive correlation between the formation of financial assets and the rate of growth in per capita income is always significant, regardless of what combination of other macroeconomic policy variables are applied as further regressors” (Schmidt and Wrinkler 1999, p. 5). The implication is that high levels of financial asset formation stimulate real capital formation and technological advances, which are key factors determining growth and not the converse, namely that savings is a positive function of per capita income. Countries where the banking system exhibits a larger volume of liquid liabilities and a larger volume of credit issued to the private sector in relation to GDP, usually have higher rates of growth of per capita GDP. The evidence also reveals that countries with more developed financial systems also form more real capital and show greater technological innovation and progress.

Goldsmith (1969)<sup>3</sup> conducted the first major investigation of the relationship between the development of the financial system and economic growth on the basis of outstanding financial assets. By focussing on the financial inter-relations ratio, i.e. the ratio of the value of all outstanding financial assets in the financial sector of a given economy to the value of all outstanding real capital Goldsmith was able to conclude that there is a “positive though irregular association between the level of real national product per head and the FIR” (Goldsmith 1969, p 377). Later studies drawing on the work of Shaw (1973) and McKinnon (1973) use the relation between the monetary aggregate M2 and GDP rather than the FIR to establish the link between financial sector development and economic growth. Using cross-country regressions for 77 countries between 1960 and 1989, King and Levine<sup>4</sup> have linked real per capita growth in GDP, the growth in the capital stock, the investment share of GDP and a variable calculated to capture productivity growth with financial asset formation in an economy to:

- the ratio of liquid liabilities, i.e. currency held outside the banking system plus demand and interest bearing liabilities of banks and non-bank financial intermediaries, to GDP;
- the ratio of credit issued by the banking system to private enterprises to GDP;
- the ratio of domestic credit issued by the deposit banks to domestic credit issued by deposit banks and the central bank; and

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2 **Schmidt, Reinhard H**, and **Wrinkler, Adalbert**: *Building Financial Institutions in Developing Countries*, Working Paper Series: Finance and Development No. 45, Johann Wolfgang Goethe-Universität, Frankfurt am Main, November 1999 (p 5); **Brownbridge, Martin** and **Kirkpatrick Colin**: *Financial Regulation in Developing Countries*, Finance and Development Research Programme, Working Paper Series, Paper No. 12, IPDM, University of Manchester, January 2000.

3 **Goldsmith, R**: *Financial Structure and Development*, New Haven, Connecticut, Yale University Press, 1969.

4 **King, R.G** and **Levine, R.**: “Finance and Growth: Schumpeter might be Right”, *Quarterly Journal of Economics*, Vol. 107, pp 717-737 (1993).

- the ratio of claims on the non-financial private sector to domestic credit.

Given the link between development of the financial sector and economic growth and development the question is why has the financial sector in developing countries remained underdeveloped relative to that of the industrial countries. The modern theory of finance offers a possible explanation as follows: because of the asymmetric nature of financial information among potential borrowers and lenders it is rather difficult to organise an interpersonal and inter-temporal resource transfer due to the incentive information in any financial transaction. As the institutions that play their role in financial intermediation they have to devise mechanisms to overcome these problems. This leads to the conclusion that underdevelopment of financial institutions in most developing countries is because financial institutions in these countries are unable or unwilling to overcome the incentive related problems associated with intermediation, a conclusion that is reinforced by the behaviour in developing countries of those financial institutions that have strong ownership and management links with a major partner in an industrial country. Empirical studies of bank failure in both industrial and developing countries reveal the main causes to be poor risk evaluation and inadequate loan evaluation – both factors that reflect failure to overcome incentive related problems associated with intermediation – and fraud.<sup>5</sup>

Accordingly, financial sector development has to be one of the key strategies for LDCs hoping to achieve sustainable growth in the long-term. But building the financial sector also has to go beyond creation of new institutions; it must also include standards for prudential regulation and supervision, and training of staff to manage and regulate these institutions.

## **II. The Financial System**

The financial system consists of providers and users of financial services. The typical financial system consists of a variety of institutions, instruments and markets that facilitate the flow of financial resources between borrowers and lenders. The institutions include pawnshops and moneylenders, banks, insurance companies, leasing companies, venture capital funds, mutual funds, pension funds, brokerage houses, investment trusts and stock exchanges. Financial instruments range from currency notes and coins, cheques, mortgages, corporate bills, bonds and stocks to futures, swaps and other complex derivatives. The markets for these instruments may be organised or may be informal. The users include households, businesses and the government.

Compared to that of an industrial economy, the financial system in a typical developing country may be characterised by the absence of one or more of the providers of services, the absence of many of the instruments, and the lack of depth in the markets. The gaps are closing, however, because of a number of factors. One such factor is the widespread acceptance of the Washington consensus and its emphasis on financial

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<sup>5</sup> **BIS** *Credit Risk Modelling: Current Practices and Applications*, Basle Committee on Banking Supervision, Bank for International Settlements (BIS), April 1999, and *Sound practices for Loan Accounting and Disclosure*, Basle Committee on Banking Supervision, Bank for International Settlements (BIS), July 1999.

sector reform and modernisation, which includes removal of restrictions on ownership of financial institutions by foreign investors, and by the policy of some governments, when divesting their shares in the institutions that they owned, to employ the model of a strategic international partner who takes a significant equity position in and management control of the institution. Another factor helping to close the gap is the high level of cooperation between industrial and developing countries to combat financial sector crime, to support law enforcement by working together against money laundering and other financial sector crimes, and to improve supervision and the regulatory framework of financial institutions.

When developing countries began to modernise their financial systems most were characterised by branch banks or subsidiaries of international banks making self-liquidating loans mainly to enterprises engaged in some combination of natural resource exploitation and the distribution of goods imported mainly from the metropolitan country<sup>6</sup>. The first phase of modernisation began usually with the establishment of a central bank that was in a few instances converted into a monetary authority<sup>7</sup> especially in the decade of the 1990s when dollarisation became the fashion. The next step in modernisation was the transfer of the former branches or subsidiaries of international banks to local ownership. This was also accompanied by the establishment of stock exchanges and additional specialised financial institutions such as Grameen-type banks and other institutions for lending to small and medium sized enterprises, institutions for mortgages and other long-term lending, and for leasing, by either the private sector, or very often by the government. The process of modernisation was often interrupted by systemic crises but unlike the Asian Crisis, they were limited to the local economy and had little or no international impact<sup>8</sup>.

Financial sector crises often exposed weaknesses that compromised the role of the financial system to finance development. Among the more debilitating weaknesses are: directed credits and administered interest rates; lack of international standards; poor and non-transparent supervision; inadequate local markets for debt; a scarcity of equity<sup>9</sup>; and political interference in the management and operations of state-owned institutions. Directed credits and administered interest rates usually through government-owned or government-influenced development financial institutions or commercial banks relieved managers of responsibility for risk analysis in their credit decisions. They took the view that the corollary of government direction and influence was a government guarantee or at least a letter of comfort, which was often not worth the paper on which it was written. The result has been considerable portfolio losses leading in a number of instances to a bail out by the treasury where it was fiscally affordable, or to recapitalisation using a

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6 **Newlyn W.T.:** "The Colonial Empire", in *Banking in the British Commonwealth*, R.S. Sayers (ed), Oxford University Press 1952.

7 Around 128 central banks (excluding the European Central Bank and the Bundesbank) were established (or re-constituted) between 1945 and 2000, compared with 58 up to 1944. See Chandavarkar, Anand, *Central Banking in Developing Countries*, MacMillan Press Ltd, 1996

8 **Antwi-Asare T.O.** and **Addison E.K.Y.:** *Financial Sector Reforms and Bank Performance in Ghana*, Overseas Development Institute, 2000; and **Bonnick, Gladstone:** *Storm in a Teacup or Crisis in Jamaica's Financial Sector*, XIV Adliith Browne Memorial Lecture, Caribbean Centre for monetary Studies, 1998.

9 **IFC,** *Lessons of Experience No. 6 - Financial Institutions*, International Finance Corporation, Washington DC, 1998.

financial sector loan from the IFIs, and sometimes to the closure of many institutions, with little to show for the effort. The lack of standards and poor and non-transparent supervision meant that problems that could be masked during periods of rapid growth were quickly exposed at the first hint of crisis in the financial sector or in periods of falling output. These shortcomings also make it possible for aberrant behaviour and conflict of interest involving directors and staff of the institutions to go undetected until it is too late<sup>10</sup>. These were the kinds of problems to be addressed by the redesign of the domestic financial architecture.

### ***III. Financial Sector Regulation in Developing Countries***

Several studies have found that liberalisation of the financial system in developing countries has been accompanied by financial fragility and widespread distress affecting banks and non-financial institutions during the 1980s and 1990s<sup>11</sup>. These crises were triggered by liberalisation that was not properly sequenced and that preceded advances in financial system regulation. Liberalisation also took place in an environment of macro-economic instability and rising fiscal deficits, which in turn resulted in penal interest rates that put highly leveraged corporations at risk. Weaknesses that were masked by rapid economic growth were later exposed by economic downturn. The policy justification for prudential regulation and supervision is to prevent systemic risk and to provide protection for small depositors, objectives that sometimes conflict. Banks and other financial institutions are subject to moral hazard and adverse selection can put their clients at risk, especially the numerous atomised depositors who neither have the incentive nor the expertise to monitor the institutions.

Prior to the decade of the 1980s LDCs did not accord high priority to prudential regulation or supervision of their financial systems for two reasons. First, government policy emphasised economic regulation such as controls over interest rates and sectoral allocation of credit, because governments in LDCs were keen to use the financial system to promote economic, social and political objectives. Secondly, many developing countries had inherited banking and regulatory systems from colonial times in which the need for supervision by domestic regulators was limited because banks were owned by reputable and established foreign banks, were conservatively managed and subject to strict regulation by their parent institutions. However, the fragility that emerged in the 1980s exposed the inadequacies of the financial legislation and supervision in the face of changes in their financial systems, notably changes in the ownership of their banks and relaxation of controls.

The reforms in the financial sector of developing countries in the 1980s were in many cases stimulated by financial crises or were part of broader reforms funded by the World Bank and IMF. Conditionalities related to financial sector regulation and supervision featured prominently in financial sector adjustment loans from the IFIs. Prudential reforms followed broadly similar pattern in LDCs, which adopted a model of regulation

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10 **Bonnick, Gladstone**, 1998 (op. cit.)

11 **Brownbridge, Martin and Kirkpatrick Colin**, 2000 (op. cit.)

and supervision based on the Basle Committee's Core Principles of Effective Bank Supervision<sup>12</sup>. In this model detailed prudential regulations, set out in the banking laws and subsidiary legislation, with supervision undertaken by a public agency. Supervision entails on-site inspections and off-site monitoring of banks based on the CAMEL principles in which supervisors evaluate a bank according to its capital asset quality, management, earnings, and liquidity. These principles are also extended to deposit taking non-bank financial institutions (NBFI); supervisors aim to inspect institutions at regular intervals and institutions are required to submit regular financial reports to the supervisors. Many LDCs have also adopted the Basle capital adequacy ratios; prudential reforms in many countries have also included considerable institutional strengthening and some have also adopted some type of insurance deposit.

Another source of regulatory support is the Financial Stability Forum (FSF), created in 1999. The purpose of the FSF is to promote financial sector stability through information exchange and international cooperation in financial supervision and surveillance. It brings together on a regular basis national authorities responsible for financial stability in significant financial centres, international financial institutions, sector specific international groupings of regulators and supervisors, and committees of central bank experts. Its major role has been to coordinate a set of codes and standards that are at the heart of the new international financial architecture. The IMF and other standard setting agencies, working together, have developed standards and codes covering a number of economic and financial areas, including data dissemination, fiscal, monetary and financial policy transparency, banking regulation and supervision, securities and insurance regulation, accounting, auditing, bankruptcy and corporate governance. The adoption of internationally recognized standards, or codes of good practices, can help to improve economic policy-making and strengthen the international financial system. The burden of adjusting to the new codes and standards falls heavily on the developing countries and the time required to implement them should not be underestimated, even for large and relatively sophisticated countries like India and Brazil. But the attempt to set and universally apply standards and codes suffers from the inadequate participation of developing countries in the process, which violates Helleiner's principle of "No harmonisation without representation"<sup>13</sup>.

Financial sector crisis also exposes the inadequacies of macro-economic policy, especially with respect to the exchange rates and the financing of the fiscal deficit. Very often inadequate exchange rate policies may encourage external exposures that are not sustainable and cause financial resources to be directed to activities that carry an inherent exchange risk, e.g. property development for the domestic market, or that are not commercially viable. It is usually with respect to fiscal policy that the greatest weakness in the domestic financial architecture becomes evident. Deficit spending by the government was until the IMF-World Bank led financial sector reforms in the latter

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12 The Basel Committee on Banking Supervision: *Core Principles for Effective Bank Supervision*, Bank for International Settlements, September 1997

13 **Ocampo, José Antonio**: "Recasting the International Financial Agenda", *International Capital Markets* Vol. 21/No.1 Commonwealth Secretariat, London, February 2001.

half of the last decade, often financed by borrowing from the central bank. Central banks, with their capacity to create liquidity were legally bound to purchase government paper and provide an overdraft (ways and means) to fund the fiscal deficit, and this they did often with severe balance of payments and inflationary consequences. Some countries, to avoid repeating the excesses of money creation through borrowing from the central bank, have accepted dollarisation<sup>14</sup> and the replacement of the central bank with a monetary authority that does not have the capacity to create liquidity.

#### **IV. Making the Structures Work.**

Although LDCs have made substantial progress in financial sector regulation and supervision the real challenge is to make the regulations work in the way and for the purpose they were intended. If changes in the financial system are to be useful to LDCs, should satisfy four criteria which Blackman has identified in relation to interest rate policy in Barbados between 1972 and 1987, but which have much wider applicability to the general condition of the financial sector. These conditions are (i) the recognition of market imperfections in the financial sector; (ii) the imperative of economic development; (iii) the insulation of the economy against volatility; and (iv) the development of the financial markets themselves<sup>15</sup>. Sensitivity to these conditions should influence both the pace and scope of financial sector liberalisation and the architecture of the system.

Many LDCs suffered banking crises long after they had begun to implement prudential reforms. For example, Indonesia, Korea, Malaysia and Thailand suffered in the 1997-98 Asian Crisis even though they had implemented reforms in the 1980s and 1990s; and Kenya, which had also begun reforms in the 1980s, suffered several bank failures in the 1990s. Although no prudential regulatory system or supervisory model can prevent bank failure, and zero tolerance of bank failure should never be the objective of financial sector regulation and supervision, events in many developing countries indicate that the systems are still prone to major weaknesses. Hanohan<sup>16</sup> has identified three sources of weakness: macro-economic epidemics; poor management and other microeconomic deficiencies; and endemic crisis in a government-permeated banking system where political interference is the "Achilles' heel of any regulatory system". In addition other causes are weakness of the supervision office, deficiencies in the laws and law enforcement, and migration of financial institutions or transactions from the more highly regulated and supervised to the less highly regulated and supervised part of the financial system.

The capacity of financial institutions to withstand macroeconomic shock varies, but since some institutions withstand the shock this suggests that others also could have done as

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14 See: **Berg, Andrew** and **Borensztein, Eduardo R**, *The Pros and Cons of Full Dollarization*, IMF, Working Paper WP/00/50, March 2000; **Terrones, Marco** and **Catao, Luis**, *Determinants of Dollarization - The Banking Side*, IMF Working Paper WP/00/146, August 2000.

15 **Blackman Courtney N.**: *Central Banking in Theory and Practice: A Small State Perspective*, Monograph (Special Studies) Series No. 26, Caribbean Centre for Monetary Studies, University of the West Indies, St. Augustine, Trinidad. (p 102)

16 **Hanohan, Patrick**, *Banking Systems in Developing and Transition Countries: Diagnosis and Prediction*, BIS Working Papers No.39, BIS Basle, January 1997.

well. On the microeconomic side, unless the system is very concentrated, no one institution is likely to be large enough to cause an asset price boom and bust on its own. Rather the microeconomic failures have to do more with management negligence, shortsightedness or fraud, which should be discovered by effective application of modern supervisory and regulatory techniques. Government influence on the banking system may take a combination of forms including directed credits, excessive borrowing from the central bank, high reserve requirements, encouraging commercial banks to borrow abroad to ease pressure on the reserves, under-capitalisation and inadequate provisioning, especially by government owned financial institutions. An additional twist is provided in a federal system where state governments may use the banks they own as sources of funding for their own borrowing needs.

The regulatory system will not live up to expectations if the financial sector legislation omits important prudential guidelines or includes provisions that are not precise enough. Examples of these omissions are the low levels of minimum capital requirements in many Sub-Saharan African countries, overly lenient loan classification and provisioning rules and the omission of restrictions on excessive exposure to high risk sectors, e.g. real estate, exposed by the Asian Crisis. Nor will the system deliver if there is weak enforcement of the prudential regulations by the supervisors – known as regulatory forbearance. Regulatory forbearance may be the result of political pressure on the regulatory authorities who may not wish to alienate the politicians who appoint them or it may be the result of “regulatory capture”. This could take the form of the regulators being afraid that disclosure of problems may have the effect of a self-fulfilling prophecy, or may have an adverse effect on their career prospects. The fear of regulatory forbearance, however, should not be used as an argument to replace the judgements of mature and experienced officers by automatic disclosure. The system should always retain scope for supervisors to use their discretion not to disclose information in their early dealings with an institution that may be in difficulty, especially if there is a strong possibility that the injection of liquidity could save the institution.

Institutions may also migrate transactions to that part of the financial sector that is least regulated, either in an attempt to evade detection or in an effort to be innovative and innovation in the financial sector is always ahead of regulation. This migration highlights the need to regulate transactions rather than institutions since one of the features of financial sector modernisation is the dissolution of boundaries between institutions. Some countries have attempted to resolve the issues created by dissolution of boundaries between financial institutions by introducing a single regulator similar to the Financial Services Authority (FSA) in the UK. But this model offers no greater security to the architecture of the system because it has no intrinsic features that reduce regulatory forbearance, provide protection against interference nor solve the shortage of skills.

Given the weaknesses in the system of regulation and the causes of failure of financial institutions in LDCs, there must be considerable doubt over whether the model designed for industrial economies is appropriate for developing countries. Goodhart<sup>17</sup> et al take

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<sup>17</sup> Goodhart, Charles, Phillip Hartman, David Llewellyn, Lilliana Rojas-Saurez and Steven Weisbod, *Financial Regulation: Why How and Where Now?* Routledge, London 1998

the view that the developed country model is justified because “the general analysis of, rationale for, and principles of, financial regulation are not fundamentally different in developing countries” (1998, p.99). Caprio<sup>18</sup> questions the wisdom of exporting industrial country regulatory methodology to developing countries especially since it has not, in any event prevented bank failures. But such an argument only recognises that failure of financial institutions is impossible to prevent even when applying the most sophisticated techniques of supervision and regulation and in circumstances where markets are much better developed.

For developing countries to benefit from the positive effects of developed financial markets and institutions it is not sufficient for them to liberalise the financial system and become proficient at prudential regulation and supervision, or participate in the development of and adopt internationally acceptable codes and standards and keep their financial sector open to foreign investment and the accompanying technology transfer– getting the architecture right – they must also have the human resources to make the system work. This implies heavy investment in training and heavy emphasis on the principles and practice of good governance in financial institutions for ultimately, the soundness of the financial system will depend on the quality of the personnel entrusted with the tasks of managing institutions and regulating and supervising them.

### **Summary**

Developing countries can benefit from the positive relationship between financial sector development and economic growth but to do so they must modernise and reform the financial sector and markets. While the first steps in financial sector reform concentrated on the creation of new and specialised institutions, endemic crises in the decade of the 1980s and 1990s culminating in the Asian Crisis of 1997-98 also highlighted the importance of prudential regulation and supervision. Even though the importance of regulation and supervision to the orderly development of markets and institutions is clear developing countries have continued to experience set backs in the implementation. To make prudential supervision and regulation work better developing countries should not neglect the importance of sequencing financial sector liberalisation and prudential regulation. They should err on the side of higher capital requirements that set out in the Basle Core Principles, impose tighter lending limits and financial restraints, have well defined intervention rules that limit forbearance and reduce political pressure on regulators and, above all, they should invest heavily in the training of staff needed to manage and regulate the financial system.

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18 Caprio Gerrard, *Bank Regulation: The Case of the Missing Mode*, Policy Research Working Paper 1574, World Bank 1996; *Safe and Sound banking in Developing Countries: We're not in Kansas Anymore*, Policy Research Working Paper 1739, World Bank, 1997