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How Well Has South Asia Coped With the Global Financial Crisis: Monetary Management, Regulation and Market Discipline

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and
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Abstract

The global financial crisis affected most economies primarily through three channels– declining trade volumes, exchange rate pressure and asset deflation. The paper focuses on the impact of the crisis in the four major economies of South Asia viz. Bangladesh, India, Pakistan and Sri Lanka and how by a combination of swift actions on the monetary, fiscal and exchange rate fronts the worst consequences of the crisis were averted. The regulatory and supervisory systems in these four economies are then benchmarked against certain desirable norms, which have emerged out of post-crisis international deliberations. It is felt that South Asian regulatory systems perform fairly well vis-à-vis these norms. The paper also discusses three major unresolved issues on the regulatory and supervisory dimensions. With regard to the Principles versus Rules-based regulation controversy, it recommends that a more promising and safer course of action would be to make the existing (rules-based) system more flexible and dynamic. Secondly, with a view to strengthening market discipline, several new initiatives seem to be in order, the most important being the switchover to a risk-based premium of deposit insurance. Finally, the paper discusses the crucial issue of independence of regulators and supervisors from official (government) interference and

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market "noise", in executing their mandate of financial stability. The authors are of the view that the future success of financial reforms in South Asia will be crucially contingent upon how successfully the regulatory architecture adapts to the twin dictates of financial development and financial stability, the extent to which market discipline can be usefully deployed as a pillar to support this architecture; and the degree to which regulatory and supervisory independence is not compromised.

I. Introduction

In recent years, there has been a marked shift in attitude towards financial development among economic growth theorists. The earlier scepticism on the role of financial development for economic growth[2] has given way to a growing realisation that financial markets and institutions play a defining role in the economic evolution of societies. Empirical evidence based on both cross-country as well as micro-level studies lends support to the view that financial development crucially affects the speed and pattern of economic development. The financial system is traditionally viewed as performing the following five functions (see Levine (1997), Archer (2006), etc.)[3]: (i) allocating resources; (ii) mobilising savings; (iii) expanding goods and services markets; (iv) facilitating risk pooling, hedging and diversification; and (v) monitoring managers and exercising corporate control. To this list one must append an extra function, which has assumed a great deal of importance in recent years in least developed countries (LDCs) and emerging market economies (EMEs), viz., (vi) providing credit to the informal sector (rural as well as urban) via microfinance institutions.
However, even within the broad consensus of recognising the role of financial systems for economic development, important areas of disagreement persist, viz., the type of financial system most conducive to growth, private versus public ownership of financial institutions, the degree of regulation and supervision, the role of financial innovations and the pace and extent of financial liberalisation. The Latin American crises of the 1980s and 1990s, the Asian financial crisis of the late 1990s and the current global recession have once again brought the critical role of financial institutions under the scanner, and introduced important caveats to the consensus. The present paper aims to take stock of some of these issues in the South Asian context. While it is certainly not being claimed that the South Asian experience is representative of EMEs in general, it is nevertheless felt that some of the lessons drawn here would have some relevance transcending their immediate context.

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[2] Several well known tracts on development economics, for example, frequently make no reference to the financial system at all. See Meier, G. & D. Seers (1984) (Ed.), '*Pioneers in Development'*, Oxford Univ. Press, New York, Stern, N. (1989) 'The Economics of Development: A survey' *Economic Journal*, vol. 99, p. 597-685.

[3] Levine, R. (1997), 'Financial development and Economic Growth: Views and Agenda', *Journal of Economic Literature*, Vol. XXXV, June, p. 688-726.

The rest of the paper is organised as follows. The next section examines the financial system in four South Asian economies, viz., India, Pakistan, Bangladesh and Sri Lanka. The macro-economic management in South Asia during the recent global crisis is discussed in section three. The fourth section is devoted to a study of the region's regulatory and supervisory response to the financial crisis. Three major regulatory and supervisory issues—principles versus rules-based supervision, role of market discipline in financial regulation and regulatory and supervisory independence—are examined in section five. The final section provides some concluding remarks.

II. South Asian Financial System: A Helicopter Overview

Indian Financial System: Major Highlights

The financial system in India comprises the Reserve Bank of India (RBI) at the apex, numerous financial intermediaries, money market, debt market, foreign exchange market and equity market. Financial intermediaries include commercial banks, co-operative banks and non-bank financial institutions (NBFIs). Commercial banks constitute the largest segment of India's financial system and a characteristic feature of this sector is the dominance of the public commercial banks (PCBs) both in terms of branch offices and banking operations. Other types of banks include regional rural banks, local area banks and co-operative banks. Co-operative banking is also an integral component of India's banking system. It comprises two major segments, viz., urban co-operative banks (UCBs) and rural co-operative credit institutions (RCCIs). Of these, RCCIs have a far more extensive branch network and a more diverse and complex structure than UCBs that maintain a single-tier structure. NBFIs are an important segment of India's financial system, embracing a heterogeneous group of diverse institutions, including development finance institutions (DFIs), insurance companies, non-bank financial companies (NBFCs), primary dealers (PDs) and capital market intermediaries such as mutual funds. NBFIs offer a variety of products and services which play an important role in providing access to financial services to a vast section of the population. Recent years have also witnessed a phenomenal growth in the number of microfinance institutions (MFIs).[4] The RBI plays an instrumental role in the Indian financial sector. Being the country's monetary authority, it formulates, implements and monitors India's monetary policy. As a prime regulator and supervisor of India's financial system, it uses and prescribes broad parameters of banking operations within which the country's banking and financial system functions. The RBI supervises, among others, commercial banks, cooperative banks, development finance institutions (DFIs) and non-banking financial companies (NBFCs). Through its monetary policy, it aims to secure stability in the internal and external value of

[4] Nachane and Islam (2010), 'Financial Sector Reforms in South Asia - A Perspective' in *South Asian Perspectives* (Singapore: Institute of South Asian Studies, January 2010).

the Indian currency and manages the foreign exchange market. It is also the banker to the government. It provides merchant banking services to both the central and state governments. The RBI also does other traditional central banking activities such as currency issuance and promotional functions, etc.

Till the early 1990s, the Indian financial system was characterised *inter alia* by administered interest rates guided by social concerns, high intermediation costs, low base of capital, directed credit programmes for the priority sectors, high degree of non-performing assets, low intensity of technologies, stringent entry barriers for new entrants, and excessive regulations. Since the early 1990s financial sector reforms have been initiated with the explicit objective of developing a market-oriented, competitive, well-diversified and transparent financial system. Financial liberalisation [5] was viewed as an integral component of overall liberalisation, with the twin belief that (i) liberalisation in the real sector could not proceed satisfactorily in the absence of financial liberalisation, and (ii) financial liberalisation was an 'enabling condition' of faster economic growth, as it increases competition, transfer of know-how and transparency. Recent studies such as those by Rodrik et al (2002), Alcala & Ciccone (2004) and Kaufmann et al (2007)[6] clearly indicate the importance of institutional features such as corruption, rule of law and general governance issues (such as political accountability, quality of bureaucracy, etc.) in determining whether the outcomes of financial liberalisation would be beneficial or otherwise. This could be an important part of the explanation as to why liberalisation usually succeeds in developed countries but often fails in the developing world. Some of the deficiencies noticed in the outcomes associated with the financial liberalisation programme in India are attributable to the above factors (though formal studies seem to be lacking in this aspect).

In broad terms, the financial sector reforms encompass six areas: (i) removing the restrictions on pricing of assets; (ii) building of institutional and technological infrastructure; (iii) strengthening the risk management practices; (iv) fine-tuning of the market microstructure; (v) changing the legal framework to remove structural rigidities; and (vi) widening and deepening the market with new participants and instruments. (For an extended review and critique of this process refer to Nachane & Islam (2010).)[7] An idea of the evolution of the financial sector in India can be gained from a look at at a few basic indicators. The size of the

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[5] The process of financial liberalisation is usually viewed as encompassing four dimensions- (i) financial deregulation, (ii) financial innovation, (iii) market making, and (iv) financial supervision.

[6] Rodrik, D., A. Subramanian and F. Trebbi (2002), 'Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development', *NBER Working Paper 9305.*
Alcala, F. and A. Ciccone (2004), 'Trade and Productivity', *Quarterly Journal of Economics,* vol. 119 (2), p. 612-645. Kaufmann, D., A. Kraay and H.Mastruzzi (2007), 'Governance Matters VI: Governance Indicators for 1996-2006' *World Bank Policy Research Discussion Paper 4280.*

[7] Nachane and Islam (2010), 'Financial Sector Reforms in South Asia - A Perspective' in *South Asian Perspectives* (Singapore: Institute of South Asian Studies, January 2010).

financial system (S)[8] in India has nearly doubled from 1.69 in 2000 to 3.33 in 2008, having overtaken not only China (with a value for the ratio S of 3.00 in 2008) but also advanced economies like the US (3.24), UK (2.74), Japan (2.77) and South Korea (2.54).[9] Other notable features of the Indian financial system are that banks form the major source of corporate finance (thus resembling the German rather than the US pattern)[10] with public ownership the dominant structure.[11]

It is also a highly concentrated financial system with the top (by asset size) five banks accounting for about 38 per cent of the total banking assets -- a figure that has remained more or less unchanged over the past decade.[12] For details see Figure 1-3 and Table 1 for the banking and non-banking financial system of India and other South Asia economies.

Pakistan's Financial System: A Brief Overview

The financial system in Pakistan comprises the State Bank of Pakistan (SBP) at the apex, various financial intermediaries, the money market and the capital market. Financial intermediaries include commercial banks and NBFIs. Being the country's central bank, the SBP regulates and supervises Pakistan's banking sector along with all NBFIs, except for *mudarabahs*[13] and leasing companies. It conducts monetary policy, and manages public debt and foreign exchanges. It is also the banker to the government and performs other traditional central banking functions.

Banks, with a combined share of 72 per cent in total assets, dominate the asset base of Pakistan's financial sector. NBFIs are classified into eight different groups of institutions,

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8 S is defined as $S = \frac{\lfloor CBA+MC+B \rfloor}{GNP\ at\ market\ prices}$ (where CBA represents commercial banks' assets, MC is equity market capitalisation and B stands for bonds outstanding).

9 This is not as counter-intuitive as it seems – much of the paradox being explained by India's relatively low GNP. For example US commercial banking assets in 2009 were about 15 times those of India's whereas those for UK were about four times the Indian figure.

10 Of the total non-food lending to the commercial sector in 2010-11, banks accounted for 58.12 per cent, while the respective shares of domestic non-bank and foreign non-bank sources were 25.37 per cent and 16.50 per cent, respectively. Further, within the domestic sector the share (as a percentage of total commercial sector credit) of equity (public offerings plus private placements) was 7.59 per cent, the share of non-banking finance companies (and housing companies) was 8.79 per cent, that of large all-India financial conglomerates (such as NABARD, NHB, LIC, etc.) was 6.26 per cent, while CPs accounted for a minuscule 2.76 per cent (see Table IV.10 in the Reserve Bank of India (2011), 'Macroeconomic and Monetary Developments in 2010-11'.

11 The share of public sector banks' assets as a percentage of the total banking system's assets has come down from 80 per cent in 2000 to about 69 per cent in 2009. Foreign banks' assets as a percentage of total bank assets are marginal at 8 per cent (as of 2009), having risen slightly over the last decade (the 2000 figure was at 7 per cent).

12 Similarly, the share of the top five listed companies in equity market capitalisation has been more or less constant over the last decade at around 29 per cent.

13 A *mudarabah* is an investment partnership, whereby the investor (the *rab ul mal*) provides capital to another party/entrepreneur (the *mudarib*) in order to undertake a business/investment activity. While profits are shared on a pre-agreed ratio, loss of investment is borne by the investor only and the *mudarib* loses its share of the expected income.

namely, DFIs, investment banks, leasing companies, mutual funds, housing finance companies, discount houses, *mudarabahs* and venture capital companies. Pakistan has a vibrant equity market and the size of the market capitalisation is about 20 per cent of the country's GDP. Figure 1-3 and Table 1 show the state of the banking and non-banking financial system of Pakistan and selected economies.

The supervision of the financial sector in Pakistan has been invested with two regulators, namely the SBP and the SECP. Until December 2002, the SBP was responsible for regulating both the scheduled banks and the NBFIs. However, the SECP's responsibilities overlapped with those of the SBP in some circumstances. Subsequently, the SECP, which was initially concerned with the regulation of the corporate sector and the capital market, was also empowered to supervise the NBFIs (except DFIs and House Building Finance Corporation) from December 2002. In addition, the SECP has been empowered to oversee various corporate and financial-sector service providers, including chartered accountant firms, credit-rating agencies, corporate secretaries, brokers and surveyors.

The financial sector restructuring programmes in Pakistan started in the late 1980s with the twin objectives of strengthening the existing financial institutions, on the one hand, and developing an efficient financial system, on the other. The reform programmes focused on, *inter alia*, privatisation of public sector banks, licensing of new commercial banks, mergers and acquisitions of various financial institutions, rationalisation of interest rate structures, non-performing loan (NPL) resolution, monetary and credit management, current and capital account liberalisation, capital market development, and autonomy of the SBP and its restructuring. (For an extended review and critique of this process see Nachane & Islam (2010).[14]

Bangladesh's Financial System: Salient Characteristics

The financial system of Bangladesh comprises the Bangladesh Bank (BB) at the apex, numerous financial intermediaries, the money market, the debt market and the stock market. Financial intermediaries include commercial banks, specialised banks, NBFIs and MFIs, the last constituting a very special feature of the Bangladesh financial system. The BB, being the central monetary authority of Bangladesh, performs most of the traditional functions of a central bank such as the supervision and regulation of banks and NBFIs, formulation and implementation of monetary policy, management of foreign exchange reserves, and note issuance, besides being the banker to the government.

The financial sector in Bangladesh is highly bank-dominated. NBFIs are an integral part of the financial system of Bangladesh consisting of investment, finance, leasing companies, etc.,

[14] Nachane and Islam (2010), 'Financial Sector Reforms in South Asia - A Perspective' in *South Asian Perspectives* (Singapore: Institute of South Asian Studies, January 2010).

with their operations regulated under the Financial Institutions Act, 1993. MFIs are one of the fastest growing financial intermediaries in Bangladesh, offering micro-credit programmes (MCPs) to approximately 25 million borrowers, located primarily in the rural areas. These micro-credit programmes are implemented by various formal financial institutions, viz., nationalised commercial banks, specialised banks, specialised government organisations and semi-formal financial institutions that include nearly 1,000 NGO-MFIs. The insurance markets in Bangladesh remain small which is regulated under the Insurance Act. Equity market listings and capitalisation in Bangladesh have grown markedly in recent years but account for only 8 to 10 per cent of the country's GDP. Figure 1-3 and Table 1 show the state of the banking and non-banking financial system of Bangladesh and selected economies.

The BB assesses the performance and soundness of the banking sector under the CAMEL framework, which involves analysis and evaluation of the five crucial dimensions of banking operations, namely capital adequacy, asset quality, management soundness, earnings and liquidity. An early warning system (EWS) was introduced in 2004 to streamline the BB's supervision of banks under threat of incipient crises. Measures have been undertaken to beef up risk-based supervisions.

The liberalisation process in the financial sector started in the 1980s with the privatisation of two NCBs. The reform programmes initiated under various auspices focused on several dimensions, most notably privatisation of state-owned banks, recovery of NPLs, interest rate deregulation, increasing autonomy of the BB, enhancing prudential regulation and supervision, rationalisation and merger of bank branches, and effecting improvements in the money and debt markets. For an extended review and critique of this process see Nachane & Islam (2010).[15]

Sri Lanka's Financial System: Basic Features

The financial system in Sri Lanka comprises the Central Bank of Sri Lanka (CBSL) at the apex, numerous financial intermediaries, the money market, the bond market, the foreign exchange market and the equity market. Financial intermediaries include licensed commercial banks (LCBs), licensed specialised banks (LSBs), registered finance companies, specialised leasing companies (SLCs), authorised PDs, insurance companies and venture capital companies.

The task of supervising and regulating banks, finance companies, leasing companies and primary dealers is vested in the CBSL. The Securities and Exchange Commission of Sri Lanka is responsible for supervising the stock exchanges, stock broking and dealing firms, unit trusts, venture capital companies, investment managers, margin providers and credit-

[15] *Ibid.*

rating agencies. The major objectives of the CBSL are primarily two-fold, viz., maintaining economic and price stability, and stability in financial markets. But as with most other central banks, it performs a host of other functions including currency, foreign exchange and public debt management.

LCBs dominate Sri Lanka's banking sector. NBFIs constitute only a small segment of the country's financial system. Sri Lanka has a sizable equity market. Figure 1-3 and Table 1 show the state of the banking and non-banking financial system of Sri Lanka and selected economies.

The CBSL supervises banks and other financial institutions based on a two-pronged approach of off-site and on-site surveillance. Under the off-site surveillance system, the financial condition of LCBs and LSBs is monitored on the basis of a few selected variables.[16] Off-site surveillance works as an early warning system in identifying significant and critical changes in the financial condition of banks, which might require further investigation and examination. On-site supervision is a risk-based examination process, which focuses on identification of banking risks, management of these risks and assessment of adequacy of resources to mitigate these risks, which is supplemented by an examination based on the internationally accepted CAMELS model.

The financial sector reforms in Sri Lanka can be divided into two phases: the 1977-88 period and the post-1989 period. The first phase of reforms focused on banking sector reform, interest rate deregulation and foreign exchange market liberalisation. The reform process was flagged off in 1979 with the removal of operational restrictions on foreign banks. The period also witnessed an expansion of bank branches and, additionally, several new banks and credit institutions were set up in the 1980s. The second phase, by contrast, emphasised issues of stabilisation of the financial system and relaxation of the remaining regulations. Emphasis was placed on the development of specialised financial institutions. Most of the new merchant banks, leasing companies, PDs, etc., have been instituted at this latter phase. For an extended review and critique of this process refer Nachane & Islam (2010). [17]

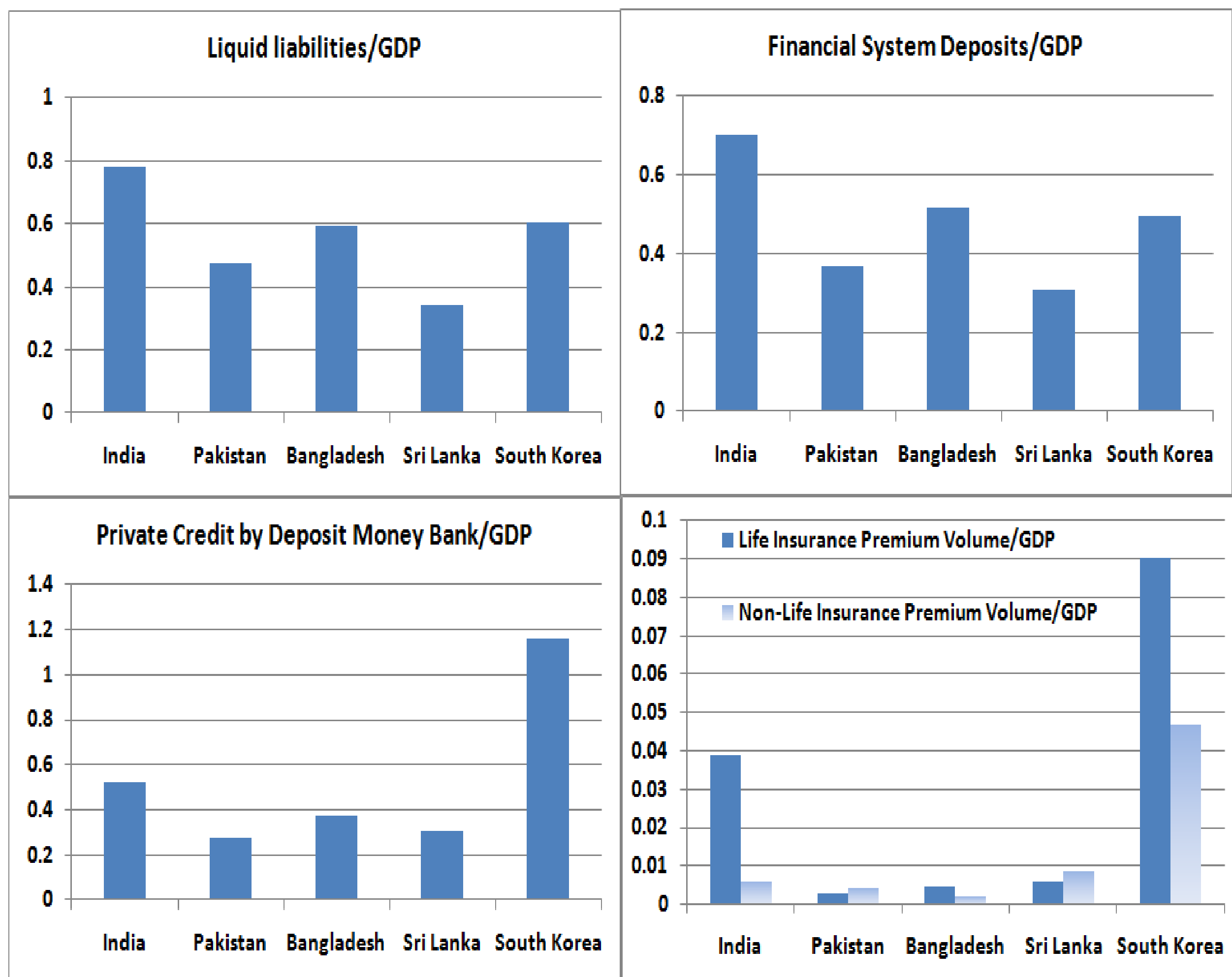
Figure 1 exhibits selected banking and other financial indicators of key South Asian economies, viz., India, Pakistan, Bangladesh and Sri Lanka. We examine the region's financial system with some key financial variables representing banking and non-banking sectors of the respective economies. We also bring the newly industrialised economy of

[16] The variables are weekly interest rates of deposits and advances, monthly returns on selected financial information, assets and liabilities, statutory liquid assets, quarterly returns on income and expenditure, capital adequacy, non-performing advances, classified advances and provisioning for bad and doubtful advances, investments in shares, interest spreads, half-yearly return on share ownership of the banks, and annual audited financial statements.

[17] Nachane and Islam (2010), 'Financial Sector Reforms in South Asia - A Perspective' in *South Asian Perspectives* (Singapore: Institute of South Asian Studies, January 2010).

South Korea into the analysis to see where the region's financial system stands in the global perspective given the fact that India, the largest economy of South Asia, has relatively an advanced financial system. Some other advanced and developing economies are also considered in this regard to examine the degree of development of the region's overall financial structure. The section also offers an intra-regional comparison as far as South Asia's financial sector is concerned.

Figure 1: Selected Financial Sector Ratios vis-à-vis GDP of India, Pakistan, Bangladesh, Sri Lanka and South Korea, 2009.[18]



Source: Database on Financial Development and Structure, World Bank, available at http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20696167~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html. Accessed on 12 March 2011.

[18] The ratio of liquid liabilities to GDP is calculated using the following deflation method: $\{(0.5)*[F_t/P_e_t + F_{t-1}/P_e_{t-1}]\}/[GDP_t/P_a_t]$ in which F is liquid liabilities, P_e_t is end-of period CPI, and P_a_t is average annual CPI. Financial System Deposit to GDP ratio is demand, time and saving deposits in deposit money banks and other financial institutions as a share of GDP. The ratio is calculated using the following deflation method: $\{(0.5)*[F_t/P_e_t + F_{t-1}/P_e_{t-1}]\}/[GDP_t/P_a_t]$ in which F_t is demand and time and saving deposits, P_e_t is end-of period CPI, and P_a_t is average annual CPI.

The ratio of liquid liabilities to GDP is a traditional indicator of financial depth. Also known as the broadest available indicator of financial intermediation, the ratio shows that India is clearly ahead of the other South Asian economies, though Bangladesh is catching up rapidly. Financial system deposits to GDP[19] ratio (the liability side of financial intermediaries) that varies positively with the income level of countries does not follow a distinctive trend in South Asia. The ratios for Pakistan and Sri Lanka are lower than the global median but the trends in India and Bangladesh are comparable with some advanced economies. The asset side of the financial intermediaries in South Asia based on the indicator of private credit by deposit money banks and other financial institutions to GDP shows that the ratio is relatively higher in the case of India followed by Bangladesh, Sri Lanka and Pakistan. The size of South Asia's insurance sector is very small though India's life insurance sector is comparatively larger than that of its peers.

India has the most advanced equity market in South Asia followed by Pakistan, Sri Lanka and Bangladesh. The stock market capitalisation to GDP ratio in India is one of the highest in the world (Figure 2).

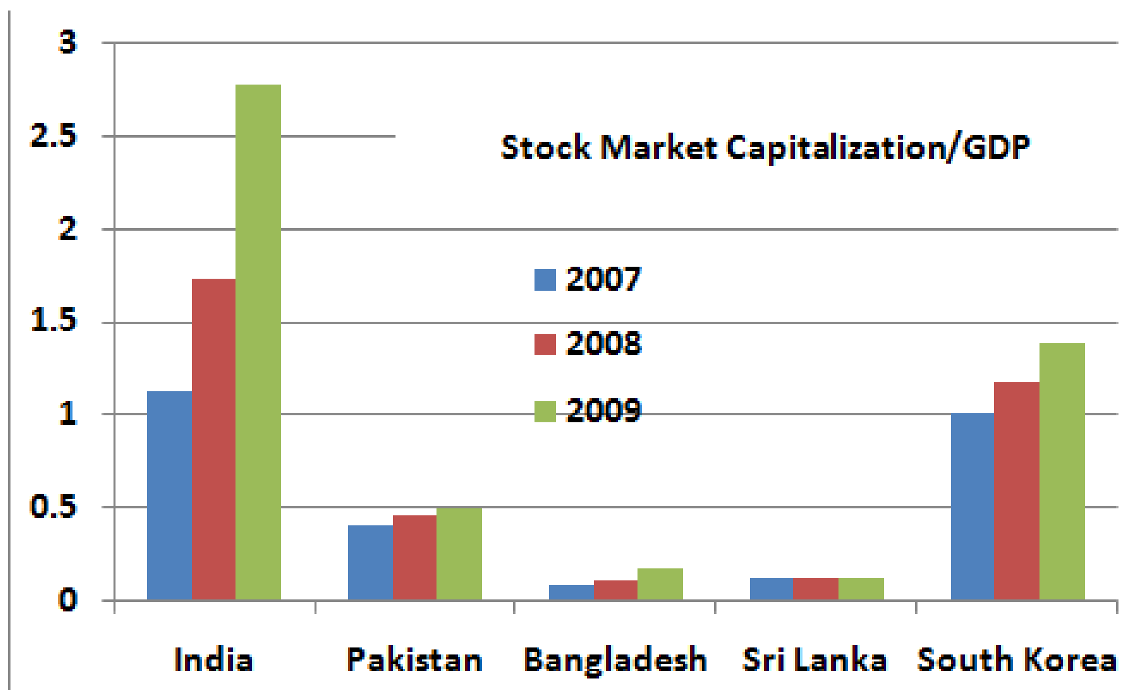
The bond market in South Asia remains very small vis-à-vis most emerging markets and the advanced world. This is one of the major weaknesses of the region's financial depth. While there is a sizeable public bond market, the size of the private bond markets in most South Asian countries is minuscule as compared to their economic output (Figure 3).

Banks remain the most important financial intermediary in almost all South Asian countries. Hence it is important to look at the micro variables of the banking sector. Table 1 shows a number of bank-related financial variables in key South Asian economies and South Korea.

In terms of bank deposits to GDP ratio, the Indian banking sector is comparable with advanced economies like South Korea, and the ratios for other South Asian economies, particularly Pakistan and Sri Lanka, remain smaller while the ratio is sizeable in the case of Bangladesh. Bank credit to bank deposits ratio that exhibits the extent to which banks intermediate the respective economies' savings into private sector credit is fairly unique in India, Pakistan and Bangladesh. Sri Lanka has one of the highest bank credit to bank deposits ratio in the region. The ratio for South Korea is 2.13. Studies found that the ratio increases with the level of economic and financial development. As far as bank concentration (the ratio of the three largest bank assets) is concerned, in Sri Lanka the three largest banks constitute over 60 per cent of the total banking system, while in India three banks comprise one-third of the banking business.

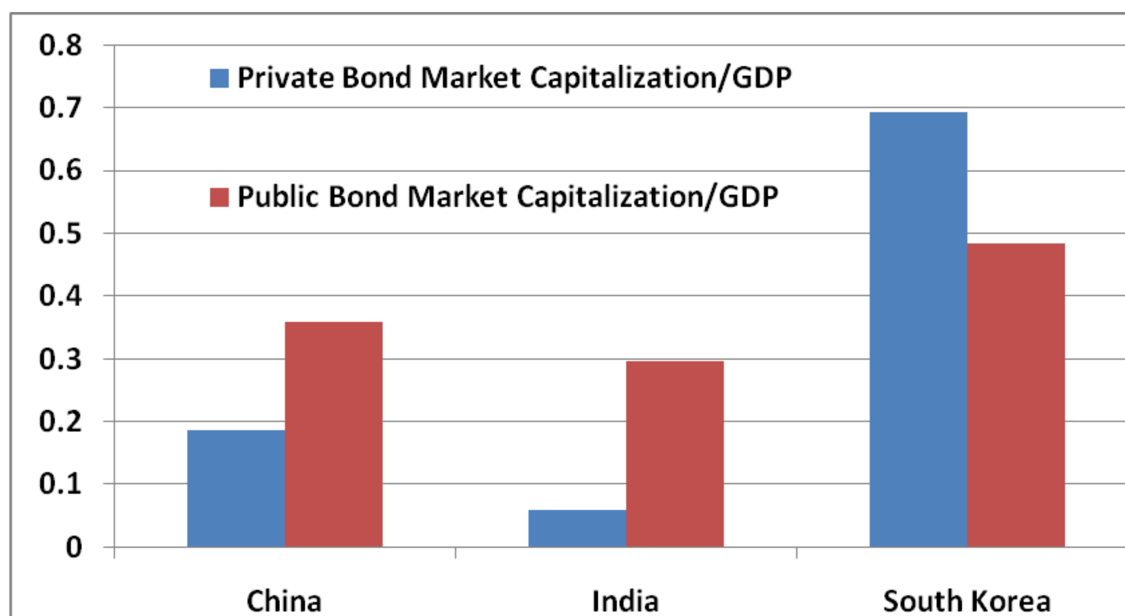
[19] The ratio of all checking, savings and time deposits in banks and bank-like financial institutions to economic activity and is a stock indicator of deposit resources available to the financial sector for its lending activities.

Figure 2: Size of Equity Markets of Selected Economies



Source: Database on Financial Development and Structure, ***World Bank.***

Figure 3: Size of Bond Markets of Selected Economies, 2009



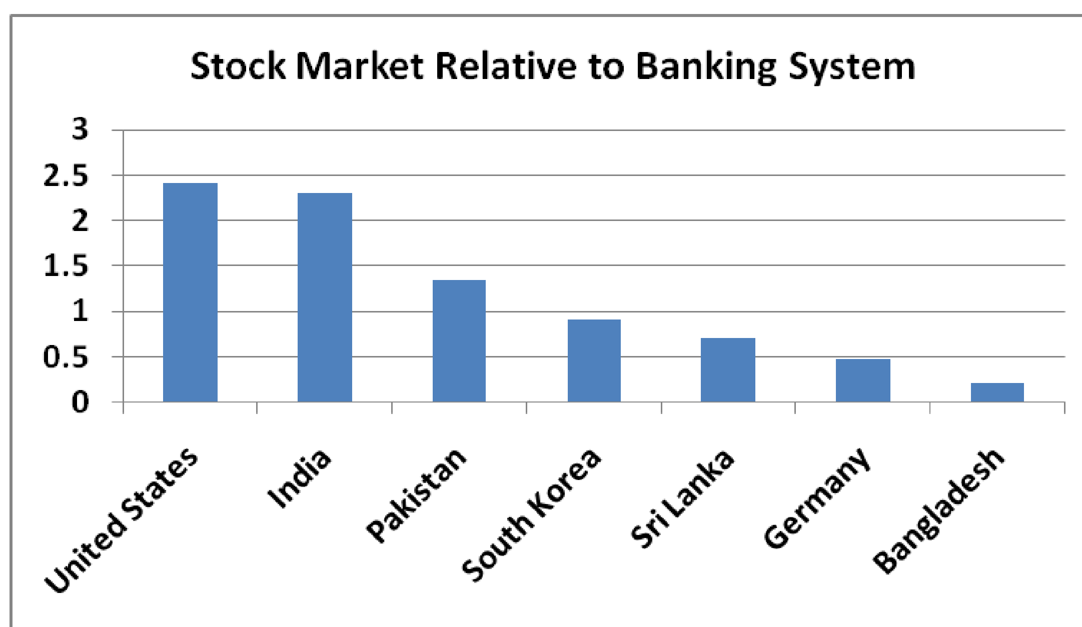
Source: Database on Financial Development and Structure, ***World Bank***.

Table 1: **Selected Banking Indicators of Key Economies of South Asia and South Korea, 2009**[20]

	Bank Deposits/GDP	Bank Credit/Bank Deposits	Bank Concentration	Bank ROA	Bank ROE	Bank Z-Score
India	0.69	0.70	0.34	0.013	0.202	8.75
Pakistan	0.35	0.70	0.51	0.002	0.010	5.28
Bangladesh	0.52	0.74	0.45	0.025	0.92	8.2
Sri Lanka	0.31	0.98	0.61	0.001	0.145	14.5
South Korea	0.59	2.13	0.56	0.009	0.560	12.2

Source: Database on Financial Development and Structure, *World Bank*.

Figure 4: Financial Structure (Stock Market Relative to Banking System) of Selected Economies



Source: Database on Financial Development and Structure, *World Bank*.

[20] Bank Concentration refers to the assets of the three largest banks as a share of assets of all commercial banks. Bank ROA is the average return on assets (net income/total assets). Bank ROE is the average return on assets (net income/total equity). Bank Z-Score is estimated as ROA+equity/assets)/sd (ROA); the standard deviation of ROA, sd (ROA), is estimated as a 5-year moving average.

Studies show that there is a positive but weak correlation between profitability (measured by ROA and ROE) and the stability of the banking sector, as measured by Z-scores. The Z-score value in South Asia ranges from 5.28 (Pakistan) to 9.8 (India) (Table 1). The value across the regions in the world varied from 6.6 to 8.9 in the past 13 years.

Finally, we look at the relative development of the stock market and banking system known as financial structure (stock market capitalisation to GDP divided by bank credit to GDP). In South Asia the importance of the stock market relative to the banking system has grown, notably in India and Pakistan (Figure 4). While Sri Lanka is catching-up fast in this regard, the financial system in Bangladesh remains highly bank-dominated.

III. Macro-Economic Management in South Asia during the Recent Global Crisis

India's Policy Response to the Crisis

Traditionally, the Reserve Bank of India (RBI) has maintained a delicate (and sometimes precarious) balance between the twin objectives of controlling inflation while maintaining the availability of credit to the productive sectors of the economy (output stabilisation). Owing to the overarching fiscal dominance resulting from the financing needs of successive five-year plans, the RBI was not very successful in taming the high inflationary potential generated by the external shocks of the 1970s and 1980s. Simultaneously the growth trajectory also remained subdued till the late 1970s. The 1990s marked a fundamental departure from the previous democratic-socialistic regime, with a wide ranging set of market oriented reforms on both the domestic and external fronts. From the point of view of macroeconomic management, the four most significant developments related to: (i) the deregulation of most domestic interest rates; (ii) the easing of fiscal constraints on monetary policy via a number of important measures including the pricing of government securities at market determined rates (June 1992), the phasing out of ad hoc treasury bills (April 1997) and more recently the passage of the Fiscal Responsibility and Budget Management (FRMB) Act 2003; (iii) the shift from a rigidly administered exchange rate to a more market determined rate; and (iv) substantial liberalisation of capital flows.

These fundamental changes led to a substantial reorientation of monetary (and to a lesser extent fiscal) policy. The prime objectives of monetary policy continued to be inflation control and growth but various other considerations also emerged including: (i) the maintenance of orderly conditions in financial markets (including the forex market); (ii) the maintenance of an adequate level of forex reserves; (iii) the selection of on an appropriate sterilisation strategy in the face of vicissitudes in capital inflows; and (iv) the management of liquidity on a daily basis. By and large macroeconomic management over the period 1995 to

2007 may be considered reasonably successful except for a brief recession brought about in 1997-98[21] by an unduly strong monetary contraction (see RBI, 2008).[22]

Indian macro-policy was put to one of its severest tests by the recent global financial crisis. Of the four transmission channels of global shocks identified in the literature, viz., trade, finance, international commodity prices and expectations, the first two were most marked in the Indian context. As global incomes plummeted, exports growth declined from a robust level of 28.9 per cent in 2007-08 to 13.7 per cent in 2008-09 and then turned negative (-4.7 per cent) in 2009-10. From the last quarter of 2007-08, foreign portfolio investment registered negative growth for five successive quarters before regaining positive momentum in the first quarter of 2009-10. Together these factors cast a shadow on the high growth performance enjoyed by the Indian economy in the previous quinquennium. The rate of growth of gross domestic capital formation in 2008-09 was a third (6.7 per cent) of the rate achieved in 2007-08 (20.6 per cent). As a consequence, GDP growth decelerated sharply to 6.7 per cent in 2008-09 (from the high of 9.2 per cent in the previous year).[23]

The Indian policy response to the global crisis was built on three overriding considerations, viz., (i) revival *sans* stagflation; (ii) erecting firewalls around the financial sector; and (iii) ensuring safety nets for the vulnerable sections. The operational component of the policy may be summed up in a single phrase – easy money and fiscal stimuli. On the monetary policy front the repo rate was reduced in a succession of steps from 9 per cent in September 2008 to 5 per cent in March 2009 (with a corresponding reduction in the reverse repo rate from 6 per cent to 3.5 per cent). The CRR was also reduced from 9 per cent to 5 per cent over the same period, whereas the SLR was brought down by 1 per cent to 24 per cent. Altogether, it has been estimated that these measures released more than R400,000 crores (US$80 billion approximately) of liquidity into the system. There were also three successive fiscal stimuli packages amounting to a total cost of R80,100 crores (US$16.3 billion) to the exchequer.[24] By and large, the fiscal stimuli did succeed in restoring growth to its pre-crisis trajectory. Real GDP at factor cost rebounded smartly to 8.0 per cent in 2009-10 and then firmed up further to 8.6 per cent in 2010-11 (see RBI (2011) p.2).[25] Apart from ensuring adequate

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[21] This was brought about by a 200 bps rise by the RBI in response to a perceived threat to the Indian rupee in the wake of the Asian crisis. Of course, it must not be forgotten that the alternative was a very serious threat of a currency crisis.

[22] Reserve Bank of India (2008): *Reports on Currency and Finance 2003-08.*

[23] All figures in this paragraph have been sourced from various tables in Reserve Bank of India (2010): *Report on Currency and Finance 2008-09.*

[24] Fiscal Stimulus I (7 December 2008) mainly comprised an across-the-board cut of 4 per cent in excise duty (estimated cost: R31,000 crores). Fiscal stimulus II (2 January 2009) comprised R20,000 crores towards bank capitalisation over the next two years, as well as providing greater market borrowing access to state governments as well as the IIFCL (India Infrastructure Financing Co. Ltd.) (estimated cost: R70,000 crores). The final stimulus III (25 February 2009) provides a 2 per cent reduction in both the excise duty and the service tax and an extension of the previous excise duty cuts beyond 31 March 2009 (estimated cost: R29,100 crores). The total burden on the exchequer at R81,000 crores amounts to nearly 1.82 per cent of GDP (at current prices) or 2.57 per cent (at constant prices).

[25] Reserve Bank of India (2011): *Macroeconomic and Monetary Developments in 2010-11.*

liquidity for the uninterrupted supply of credit to the productive sectors of the economy, the RBI also undertook a number of prudential measures aimed at containing financial contagion risks. The latter included guidelines relating to minimum holding periods and minimum retention requirements for securitised products, augmenting provisioning cushions, counter-cyclical capital buffers, etc. All these measures have been reasonably successful in insulating the Indian economy from the worst consequences of the crisis.

Pakistan's Policy Response to the Crisis

Monetary policy in Pakistan is structured to achieve dual objectives -- promoting economic growth and maintaining price stability. To achieve these goals the central bank of Pakistan targets monetary aggregates -- broad money supply growth as an intermediate target and reserve money as an operational target -- in accordance with the projections of GDP growth and inflation.[26] Apart from traditional monetary management tools, the Pakistani financial system has witnessed some progress after India in terms of product innovation and diversification of monetary management tools. Nevertheless, the Pakistani economy experienced five episodes of high inflation in the past four decades. Two oil shocks in the 1970s and 1980s and poor fiscal management (monetisation of large fiscal deficits) in the 1990s (1988-97) and the global commodity price hikes and structural problems in the economy in the late 2000s (2008-11) led to several periods of prolonged inflation in Pakistan. Growth trajectory in South Asia's second largest economy has taken a different course since the 1990s. While most South Asian economies witnessed relatively high growth rates led by India, Pakistan's economic growth was particularly low in the 1990s (the rate averaged 3.2 in the period 1993-2002) and in the past few years it has been growing very slowly. Owing to structural and political problems in the country the role of the SBP in attaining the dual objectives has been seriously jeopardised in recent years.

Pakistan's economic circumstances in the wake of the global financial crisis had been very different from most South Asian economies, with Sri Lanka being an exception. Faced with both deficits and a record high inflation, the State Bank of Pakistan's priority even in the last quarter of 2008 was to continue its tight monetary stance. Monetary policy in Pakistan had been subservient to fiscal policy due to automatic monetisation of public debt.

The crisis further aggravated Pakistan's economic woes. Its trade deficits widened and current accounts position deteriorated sharply in the last quarter of 2008. As a result, the Pakistani currency depreciated sharply by more than 20 per cent vis-à-vis the US dollar and its foreign exchange reserves declined to US$4.1 billion in October 2008. Output growth in

[26] Monetary Policy in Pakistan, Dr. Shamshad Akhtar Governor State Bank of Pakistan, Federation of Pakistan Chambers of Commerce & Industry Karachi 30 April 2007, http://www.sbp.org.pk/about/speech/governors/dr.shamshad/2007/MP-02-May-07.pdf . Accessed on 16 January 2011.

Pakistan declined sharply to 2 per cent in 2008-09 from 5.8 per cent in 2007-08 fiscal year.[27]

Given the rapid deterioration of its macroeconomic stability, Pakistan sought help from the International Monetary Fund (IMF) in November 2008. With the IMF fund, the country averted its balance of payment crisis. But as part of loan conditionality, the SBP was mandated to stop the automatic monetisation of the Pakistan government's fiscal deficit.

While the reduction of deficits and stabilisation of key macro variables had been the major focus for Paksiatn, the SBP had to revise its monetary stance due to the excessive drain of rupee liquidity from the market (owing to a deceleration of NFA), particularly in October 2008, and strong credit demand. Given the tight liquidity conditions in the domestic market, the central bank reduced the cash reserve requirement (CRR) and exempted time deposits from the statutory liquidity requirement (SLR), among others. But it raised policy rates from 13 to 15 per cent in November 2008 given a high inflation environment.[28] In post-July 2008, the reduction of reserve ratios released close to R270 billion and other measures amounted to a cumulative liquidity of R319.5 billion in Pakistan's financial market. While the stress in the Pakistani economy remains, it registered 4.1 per cent growth in 2009-10 fiscal year.

Bangladesh's Policy Response to the Crisis

Bangladesh's economy, which demonstrated relatively lower economic growth and volatile inflation in the 1970s and 1980s, has experienced a very different course of development in the post-1990s. In the past two decades inflation has moderated and the economy experienced steady growth. Two factors – a relatively stable political system and economic reform -- perhaps have played a critical role in this regard. Owing to these factors the economy attained macroeconomic stability in recent decades. The central bank has emerged as a credible entity that has been entrusted with multiple objectives.[29] Indeed, the Bangladesh Bank's monetary policy statements in recent years have redefined conventional economic growth by emphasising 'inclusive growth' that places a special focus on small and medium-sized enterprises and growth in the agricultural sector. Nevertheless, the central bank applies traditional tools to target high-powered money and credit in pursuit of its monetary objectives.

In the absence of capital account convertibility and Bangladeshi financial institutions' very minimal exposure to credit derivatives and foreign exchange products, the central bank was not required to shift its monetary stance following the collapse of Lehman Brothers in

[27] The Economist Intelligence Unit Database.
[28] For details see various Monetary Policy Statement, 2008-09, State Bank of Pakistan.
[29] Bangladesh Bank's monetary policy statement (MPS) states that it is designed to support the government's policies and programmes in pursuit of faster inclusive economic growth and poverty reduction, while also maintaining price stability. See Monetary Policy Statement, July-December 2010, Bangladesh Bank, http://www.bangladesh-bank.org/. Accessed on 16 January 2011.

September 2008. While equity prices were affected adversely for a brief period, liquidity conditions as well as both long-term and short-term interest rates were stable. The economy was resilient in the midst of the crisis and was reflected in several macro variables -- GDP growth did not decline markedly; export earnings grew 7 per cent and 12 per cent, respectively, in 2008 and 2009, largely due to a surge in demand for low-end apparel products. Private consumption, constituting 75 per cent of GDP, expanded 5.5 per cent and 6 per cent, respectively, in 2008 and 2009.[30] Bangladesh was one of the few South Asian economies that faced less pressure with regards to its balance of payment during the crisis despite the fact that the country's terms of trade sharply deteriorated since 2007-08, largely owing to the global commodity boom. The growth of remittance flows that constitute nearly 10 per cent of GDP was buoyant even in the midst of the crisis. However, the growth of remittances began to decelerate in 2010 owing to the economic downturn in the Middle East.

To offset the demand loss for non-apparel export items, two fiscal packages worth 0.6 per cent and 0.9 per cent of GDP were announced in April and June 2009.[31] As far as monetary action is concerned, the Bangladesh Bank's policy was rather tight as the control of inflation was the major policy goal throughout 2007-08. The central bank adjusted its policy rates upward in September 2008 and November 2008 to rein in rising inflation.

To sum up, the impact of the crisis on the Bangladeshi economy was minimal compared to other South Asian economies. A favourable external position and fiscal space allowed the government to inject two stimulus packages that helped maintain overall stability in the economy. Both exports (5.6 per cent) and GDP growth (5.7 per cent) maintained their pre-crisis growth rates in 2009.[32]

Sri Lanka's Policy Response to the Crisis

Monetary and macroeconomic management in Sri Lanka has been more challenging than most South Asian economies barring Pakistan. The macroeconomic stability in the country has been fragile owing to both deficits (fiscal and current account deficits) and a high level of inflation. This has been largely due to the war bill[33] the government had to finance for decades. While reform in fiscal management is the central focus of Sri Lanka, some efforts have been made to shift its monetary policy. The multiple objectives of the Central Bank of Sri Lanka have been reduced to economic growth and price stability. Monetary policy is based on a framework of monetary targets. In the framework the final target, price stability, is

[30] The Economist Intelligence Unit Database.
[31] Tadateru Hayashi, 'Overview of Fiscal Stimulus', *Regional High-Level Workshop on 'Strengthening the Response to the Global Financial Crisis in Asia-Pacific: The Role of Monetary, Fiscal and External Debt Policies*', 27-30 July 2009 Dhaka, Bangladesh.
[32] The Economist Intelligence Unit Database.
[33] The civil war between the government and the Tamil minorities lasted two decades long.

to be achieved by influencing changes in broad money supply which is linked to reserve money through a multiplier. Reserve money is the operating target of monetary policy.[34]

As skyrocketing inflation became a major threat to Sri Lanka's macroeconomic stability, the Central Bank of Sri Lanka (CBSL) controlled reserve money growth until the third quarter of 2008. The trend was reversed in the last quarter of 2008 following the massive shortfall of net foreign assets owing to a reversal of foreign funds and the fallout from the global crisis. GDP growth in the country contracted marginally to 6 per cent in 2008 and significantly to 3.5 per cent in 2009, from 6.8 per cent in 2007. However, economic growth decelerated markedly in 2009 when the economy grew only 3.5 per cent compared with the previous year. Export growth declined sharply -- from 7.3 per cent in 2007 to 0.4 per cent in 2008 and 12.3 per cent in 2009. Nevertheless, price levels in the domestic market subsided substantially, thanks to the collapse in global commodity prices. This allowed the central bank some room to ease its monetary policy. The CBSL changed its monetary stance -- from contractionary to expansionary -- in October 2008 by cutting interest rates and reducing the statutory reserve ratio (SRR). The central bank cut both repo and reverse repo rates on several occasions to 14.74 per cent and 11.75 per cent, respectively.[35] It intervened in the foreign exchange market by augmenting dollar liquidity and reducing SRR in two steps (by 75 basis points and 150 basis points to 7.75 per cent). To further enhance the rupee liquidity CBSL also purchased treasury bills. Access by commercial banks and primary dealers to the central bank's repurchase facility was extended to 10 times per calendar month. The SRR reduction injected 24.5 billion rupees of liquidity into the market. While the fiscal space in Sri Lanka was severely constrained, two stimulus packages, equivalent to 0.4 per cent and 0.2 per cent of the country's GDP, were injected to contain the external shocks in December 2008 and May 2009. [36]

The Sri Lankan economy has recovered from the global crisis. The export sector witnessed a 5.8 per cent growth in 2010 and gross fixed investment, that stagnated to 23 to 24 per cent of its GDP for many years, have been elevated to 28 per cent. More importantly, the end of the decade-long ethnic conflict is expected to boost the economy. Consequently, the economy is projected to expand 7.6 per cent in 2010.

[34] Central Bank of Sri Lanka Website, http://www.cbsl.gov.lk/htm/english/04_mp/m_2.html#3. Accessed on 20 November 2010.

[35] *Ibid.*

[36] Tadateru Hayashi, 'Overview of Fiscal Stimulus', *Regional High-Level Workshop on 'Strengthening the Response to the Global Financial Crisis in Asia-Pacific: The Role of Monetary, Fiscal and External Debt Policies*', 27-30 July 2009, Dhaka, Bangladesh.

IV. Regulatory & Supervisory Response to the Global Crisis in South Asia

The role of national regulatory and supervisory authorities was debated extensively first in the de Larosiere Group (February 2009)[37] in the EU and then in the Working Group 1 of the G20 (March 2009).[38] The deliberations threw considerable light on the existing deficiencies in the global financial system and suggested several measures to mitigate the possibility of recurrence of such amplitude. The suggested measures embraced five distinct areas, viz,,

i. Strengthening and expanding the scope of regulation and supervision (R & S);
ii. Controlling leverage of financial institutions;
iii. Dampening pro-cyclicality of capital requirements;
iv. Reducing costs of financial failures; and
v. Devising market incentives for prudent behaviour.

A. *Scope of R&S*: It was felt that R&S not only be strengthened but that its scope also needs to be extended considerably. For strengthening R & S three measures can be considered, viz.,

- entrusting a special regulatory authority (either an existing one or a newly constituted one) with an explicit financial stability mandate;
- ensuring coordination between different regulatory authorities; and
- expanding the scope of regulation to include credit-rating agencies and private pools of capital (including hedge funds) via a system of registration, disclosure requirements and oversight.

B. *Leverage of Financial Institutions*: An important amplification factor for the current crisis has been not only the high degree of leveraging of many financial institutions but also the fact that this leveraging has very often been quite opaque. Reflecting the need for more accurate measures of balance sheet exposures, the following suggestions have emerged:

- a stronger focus by regulators on loan-to-value ratios (especially for mortgages);
- higher loan-loss provisioning norms;
- Stress-testing exercises to be conducted periodically to monitor leveraging on an on-going basis; and
- Improved disclosure requirements for complex structured products.

[37] De Larosiere Group (2009), *Report of the High-Level Group on Financial Supervision in the EU,* Brussels (Feb.)

[38] G20 (2009), *Enhancing Sound Regulation and Strengthening Transparency,* Final Report of the G20 Working Group 1.

C. *Pro-cyclicality of Capital Requirements:* A fact well-known to economists (see, e.g., Ghosh & Nachane.2003)[39] but consistently ignored by policymakers is the fact of capital adequacy requirements being pro-cyclical and hence a possibility of accentuating factor in any crisis. As the current crisis runs its course, there is a greater realisation among central bankers globally that have to be found to counter this pro-cyclicality. Two operational suggestions have been made in this context:

- requiring financial institutions to build up capital buffers during economic expansions, which could then be unwound in times of recession to forestall the adverse impact of *fair valuation*,[40] leverage and maturity mismatches; and
- imposing higher capital requirements on *systemically important* financial institutions.

D. *Reducing Cost of Financial Failures:* The welfare costs of financial crises are generally severe and fall disproportionately on disadvantaged groups in any society, and the current crisis is hardly an exception. With a view to reducing such costs, the following suggestions have been made:

- an early warning diagnostic system can contribute considerably towards containing collateral damage:
- the instituting of orderly closure rules for important financial institutions (as prevalent in the US for banks under the FDIC Improvement Act & Competitive Equality Banking Act):
- under exceptionally turbulent circumstances, the use of credit ratings by private agencies could be temporarily suspended in favour of regulators' ratings: and
- establishment of clearing houses in OTC derivatives markets.

E. *Devising Market Incentives for Prudent Behaviour:* Market incentives can play an important supplementary role in ensuing prudent behaviour by financial institutions. It is generally recognised that an important triggering factor in the current crisis has been the unregulated corporate compensation framework, which provided perverse incentives for excessive risk taking, resulting in a serious moral hazard syndrome. The solutions to this problem emerging in the deliberations of the Working Group 1 of the G20 are:

- prudential oversight of financial executive compensation schemes;
- originators of securitised products may be required to take an equity slice in the products that they sell/distribute; and
- better separation of ratings and consultancy activities of credit rating agencies.

[39] Ghosh, S. & D. Nachane (2003), 'Are Basel Capital Standards Pro-cyclical? Some Empirical Evidence from *India Economic and Political Weekly*, vol.XXXVIII, No.8, (Feb.22-28), p.777-784.

[40] Such Fair Value Accounting could be on the lines of the SFAS No.133 issued by the US Financial Accounting Standards Board in 1998.

It is not our contention here that that the above schemata constitutes a perfect recipe for insurance against future crises. However, it cannot be denied that the schemata could serve as a useful benchmark for evaluating the degree of preparedness of any national system to deal with an incipient financial crisis. Table 2 examines in detail the extent to which South Asian financial instruments measure up to these benchmark criteria. The table clearly indicates that the financial regulatory and supervisory system in India performs fairly well against these general guideposts for financial stability.

Table 2: Benchmark criteria: Implementation Status in South Asia

Benchmark Suggestion		**Implementation Status in South Asia**
A1	India	BFS (Board for Financial Supervision) established as early as November 1994. The RBI carries out this mandate under the general guidance of the BFS.
	Pakistan	No special regulatory authority. The State Bank of Pakistan regulates and supervises the financial system. NBFIs, are being regulated/supervised by the Securities and Exchange Commission (SECP).
	Bangladesh	No special regulatory authority. The Bangladesh Bank and the Securities and Exchange Commission regulate and supervise the financial system.
	Sri Lanka	No special regulatory authority. The Central bank of Sri Lanka and the Securities and Exchange Commission regulate and supervise the financial system.
A2	India	Coordination between the three major regulators RBI (Reserve Bank of India), SEBI (Securities & Exchange Board of India) and IRDA (Insurance Regulatory Development Authority) is weak and potential for conflicts not ruled out.
	Pakistan	Do
	Bangladesh	Do
	Sri Lanka	Do
A3	India	No move in this direction is in sight.
	Pakistan	Do
	Bangladesh	Do
	Sri Lanka	Do
B1	India	RBI insists on a cap of 75% on the loan to value (LTV) ratio. Risk weights are varied according to the LTV ratio.
	Pakistan	49.8%
	Bangladesh	50-80%
	Sri Lanka	75%
B2	India	Loan loss provisioning has been steeply raised in the wake of the crisis. (It currently stands at 70%)
	Pakistan	70.9%

	Bangladesh	Loan loss provisioning varies depending on type of Banks. For SCBs the required ratio is 73%
	Sri Lanka	50.8%
B3	India	A pilot stress-testing exercise was done in 2009. More detailed stress tests are proposed to be carried out twice a year.
	Pakistan	SBP started macro-stress testing of credit risk to assess the resilience of the banking system towards credit shocks since June 2008.
	Bangladesh	All banks and FIs are expected to carry out stress testing on half yearly basis (30 June and 31 December) each year with their first stress testing being conducted on 30 June2010.
	Sri Lanka	NA
B4	India	Complex derivative products such as synthetic securitisation have not been permitted so far.
	Pakistan	Do
	Bangladesh	Do
	Sri Lanka	Do
C1	India	While a system of capital buffers is not in place, pro-cyclicality is sought to be mitigated via risk weights adjustments.
	Pakistan	Do
	Bangladesh	Do
	Sri Lanka	Do
C2	India	Systemically important non-bank financial intermediaries are subject to a higher CRAR (capital to risk-weighted assets ratio) of between 12% and 15% as opposed to the regularly applicable CRAR of 9% for banks.
	Pakistan	14.3%
	Bangladesh	10%
	Sri Lanka	14.5%
D1	India	The RBI introduced the Prompt Corrective Action (PCA) scheme in December 2002. Under the PCA, the RBI will initiate certain *structured* as well as *discretionary* actions in respect of banks, which have hit certain trigger points in terms of capital to risk weighted assets ratio (CRAR), net non-performing assets (NPA) and return on assets (ROA).
	Pakistan	NA
	Bangladesh	NA
	Sri Lanka	NA
D2	India	No such provision exists.
	Pakistan	Do
	Bangladesh	Do
	Sri Lanka	Do
D3	India	No such provision exists.
	Pakistan	Do
	Bangladesh	Do

	Sri Lanka	Do
D4	India	About 75% of the OTC derivative contracts are routed through a centralised exchange – the CCIL (Clearing Corporation of India Ltd.).
	Pakistan	No such provision exists.
	Bangladesh	Do
	Sri Lanka	Do
E1	India	Such rules do not exist.
	Pakistan	Do
	Bangladesh	Do
	Sri Lanka	Do
E2	India	No provision for such an eventuality exists at the moment.
	Pakistan	Do
	Bangladesh	Do
	Sri Lanka	Do
E3	India	No formal legislation to this effect, but safeguards exist to prevent 'cherry picking' credit assessments by banks.
	Pakistan	Do
	Bangladesh	Do
	Sri Lanka	Do

Sources: Various Annual Reports and Circulars of the central banks of India, Bangladesh, Pakistan and Sri Lanka.

V. Major Regulatory & Supervisory Issues

We now discuss three issues which have figured prominently in recent general discussions about the role, jurisdiction and functions of financial regulation and supervision (R&S) bodies. The issues assume special significance in the context of the newly liberalised financial systems in the South Asian region, where the institutional structure though inherited from a colonial past, has evolved in a markedly different fashion in the decades following independence. Most of the discussion in the South Asian context has been located in India but the financial systems in the other countries of the region possess sufficient similarities with that in India (see Section 2 above) to afford the drawing of useful parallels. The three issues that we discuss are:

- principles versus rules-based supervision;
- role of market discipline in financial regulation; and
- regulatory and supervisory independence.

For the reasons just alluded to, we try to maintain the discussion at a fairly general level, with occasional references to the Indian context.

Principles versus Rules-based Regulation

The issue of p*rinciples vs rules* mode of regulation was first introduced (in the Indian context) by the *Committee on Making Mumbai an International Finance Centre*.[41] The committee chastised the RBI for the plethora of rules that financial institutions are required to follow and strongly advocated a switchover to a *principles-based* system. The more recent *Committee on Financial Sector Reforms (CFSR*) reiterated the same position but with less rhetoric and greater attention to detail. Principles-based regulation involves greater reliance on 'principles and outcome-focused, high-level rules as a means to drive at the regulatory aims we want to achieve, and less reliance on prescriptive rules' (FSA, 2007).[42] It is the CFSR's contention that the current rules-based system in India displays 'low tolerance for innovation and excessive micro-management' (Chapter 6, p.2). It therefore recommends a gradual but time-bound movement in the direction of principles-based regulation.
There are several imminent problems with the adoption of a principles-based approach. At least a few of these deserve mention.

- In a principles-based system, the interpretation of principles is often with the regulator, in contrast to a rules-based system, in which interpretation lies equally with the regulator and the regulated, with well-defined mechanisms for resolving conflicts of interpretation. Thus ironically, a principles-based system places greater discretion at the disposal of the regulator. This can lead often to arbitrary regulation, but the greater danger is of attempts by powerful corporate interests at *regulatory capture* and blocking of competition (the recent Wal-Mart case in the US is an example –see *Financial Times* 5 July 2007).
- In a litigious country (such as India, for example), the arbitration/judicial system will be overwhelmed with public interest litigations (PILs), right to information (RTI) queries and *private class actions*.
- Finally, as noted by Wallison (2007)[43], there is the *safe haven* effect of a rules-based system. Compliance with rules, which are fully transparent, gives the regulated entities a sense of absolution, which is never present in a principles-based system. Besides, there is no question of discrimination between different regulated entities in a rules-based system, a problem which is never totally absent in a principles-based system.

[41] In recent years the government of India appointed two high-level committees to draw up a future roadmap for financial sector reforms in India -- *The Committee on Making Mumbai an IFC (International Finance Centre)* under the chairmanship of Percy Mistry and *The Committee on Financial Sector Reforms (CFSR)* under the *c*hairmanship of Raghuram Rajan. The latter report in particular is a detailed examination of the Indian financial sector, and makes a number of wide-ranging recommendations.
[42] Report of the Committee on Financial Sector Reforms, *The Planning Commission, India*, http://planningcommission.nic.in/reports/genrep/report_fr.htm. Accessed on 20 February 2011.
[43] Wallison, P.J. (2007), 'America Will Prefer to Rely on Rules, Not Principles' *Financial Times* (6 July).

All this is hardly to say that existing rules-based systems in most EMEs are without defects, and several of these are highlighted effectively in the CFSR report. But instead of a switchover to a principles-based system, a far better alternative is to impart flexibility and dynamism to the existing rules, making them more transparent, and install a system of quick incentives/penalties for compliance/non-compliance.

Strengthening Market Discipline

Financial institutions interact with and are monitored by at least four distinct groups: (i) depositors; (ii) creditors; (iii) shareholders/proprietors; and (iv) market analysts and credit agencies. *Market discipline* is a generic term referring to the monitoring of financial institutions by these four distinct groups. *Direct market discipline* refers to the control/influence that market participants exert over a bank's behaviour via the bank's funding costs, while *indirect market discipline* arises from the price of a bank's securities in the primary and secondary markets (with a demand for higher return in case of an increase in perceived risk).

Pillar III of Basel II lays great emphasis on market discipline and seeks to achieve this by imposing various kinds of disclosure requirements on financial institutions (most particularly banks) relating to their capital, assets, credit risk, market risk, operational risk, etc. Since Pillar III Basel II has gone into implementation in India and Bangladesh in March 2009 and December 2009, respectively; the disclosure component of market discipline seems to be fairly in place. But it is to be remembered that while disclosures do contribute to greater transparency in financial sector operations and, to that extent, to better monitoring by all counterparties, they constitute only a necessary condition for market discipline.

Monitoring of banks and financial institutions by depositors in India is weak, primarily because of the prevalent *flat-rate deposit insurance premium*, which does not deter banks from taking unreasonable risks as they do not incur any additional premium expense in doing so. Thus, the flat-rate premium system subsidises high risk, poorly run institutions at the cost of well-run institutions and ultimately the tax-payer. An ideal deposit insurance premium pricing system should embody (a) banks paying a premium indexed to their own levels of risks, and (b) a premium level that ensures a continually solvent insurance fund (see, e.g., Demirguc-Kunt & Huizinga (2004)).[44] However, it is difficult to price individual banks accurately and it is equally tough to assess risk correctly before problems occur. Further, as bank failures are not evenly distributed over time, it is difficult to estimate long-run revenues to cover long-run costs. Secondly, the level of premium cannot be so large as to threaten the viability of an otherwise sound institution. In short, risk-based premium (RBP) should be viewed as a complement to, rather than a substitute for, other methods of checking excessive risk taking like risk-based capital requirement prescriptions, strong supervision and direct restraints on risky activities. There is an increasing move towards a risk-based premium

[44] Demirguc-Kunt, Asli and Huizinga, Harry (2004), 'Market Discipline and Deposit Insurance,' *Journal of Monetary Economics*, vol. 51(2), pages 375-399.

system (RBP) across the globe and if India also falls in with this trend, considerable work is in progress for developing methodologies for this purpose. Moving towards an RBP system could be an important move in the direction of strengthening market discipline in India. Interestingly, the Bangladesh Bank has recently approved the new risk-based premium rate and the amount of coverage, which will come into force after the government's approval.

Monitoring of banks by shareholders traditionally occurs from the responses of equity values to changes in the perceived risks of banks. If market discipline is effective in improving bank governance, then we must ensure that publicly listed banks (with constantly available market signals from their equity and bond prices) should take less risk than similarly placed non-publicly traded banks. There have been several empirical tests of this and similar hypotheses (see, e.g., Kwan (20002), Flannery (2002), Park & Peristiani (2006)).[45] The empirical testing usually proceeds by regressing measures of bank risk taking, e.g., credit risk, earnings volatility, capitalisations, etc., on a vector of bank characteristics (size and mix of portfolio, funding mix, etc.) and a dummy variable for publicly traded banks. While the empirical conclusions naturally differ widely, nevertheless there seems to be a fairly broad consensus around two propositions:

i. there does not seem to be a significant difference in the risk profile between publicly traded and non-traded banks; and

ii. very often publicly traded banks tend to have worse supervisory ratings than non-publicly traded banks.

There is one additional caveat to the market disciplining role of shareholders. The interests of bank shareholders may often be opposed to those of governmental regulators. While shareholders may be oriented towards maximising bank net worth (and in the process devise incentive schemes for managers that motivate them to greater risk taking), regulators may have financial stability considerations uppermost in their minds and thus try to restrain unnecessarily risky behaviour by bank managers. One additional way to strengthen market discipline is via the so-called Chicago Fed Plan (see Keehn 1989)[46], which proposes the inclusion of a mandatory *subordinated debt* [47] component in bank capital requirements (see

[45] Kwan, Simon H. (2002), 'The Promise and Limits of Market Discipline in Banking.' *FRBSF Economic Letter* 2002-36 (13 December). Flannery, Mark J. (2001), 'The Faces of "Market Discipline".' *Journal of Financial Services Research*. 20: 2/3, 107-119. Bliss, Robert R. and Mark J. Flannery (2002), 'Market Discipline in the Governance of U.S. Bank Holding Companies: Monitoring vs. Influencing'. *European Finance Review*. 6, 361-395.Park, Sangkyun and Peristiani, Stavros (2007), 'Are Bank Shareholders Enemies of Regulators or a Potential Source of Market Discipline?' *Journal of Banking & Finance*, Elsevier, vol. 31(8), pages 2493-2515, August.

[46] Keehn, S. (1989), 'Banking on the Balance: Powers and the Safety Net', Monograph, *Federal Reserve Bank of Chicago.*

[47] Subordinated debt (or junior debt) is debt that is unsecured and has lower order of claims than other debts in the event of closure (of a company).

also Calomiris & Powell (2000), Evanoff & Wall (2000) etc.).[48] Interestingly, subordinated debt can act as an important market disciplining factor, since as the perceived risks of a bank increase, holders of subordinated liabilities will require a higher return to compensate for the extra perceived risk. Several studies (Jagtiani & Lemieux (2001), Evanoff & Wall (2002), Sironi (20003), etc,)[49] have noted that issuance and secondary market risk premia on traded subordinated debt are correlated positively with risk measures such as asset portfolio composition, credit ratings, probability of undercapitalisation and/or failure, etc. In India, as in other South Asian countries, as of now, there is no mandatory requirement for subordinate debt, and it is a suggestion worth careful consideration as to whether such a mandatory requirement be imposed in the interests of market discipline.

Regulatory & Supervisory Independence (RSI)

The issue of central bank independence (CBI) has been discussed virtually threadbare in the literature (see Cukierman (1992), Beechey et al (2008), Bernanke (2009) etc.),[50] with an almost universal agreement on its desirability. CBI strictly interpreted refers to the autonomy of a central bank in deciding upon the stance of monetary policy. In recent years there have been frequent concerns expressed publicly (though in guarded language) by RBI officials about the necessity to strengthen RBI autonomy in exercising its monetary policy mandate.
However, as in this paper our focus is on regulatory and supervisory functions of the central bank, the issue of relevance to us is that of *regulatory and supervisory independence* (RSI). RSI is often confused with central bank independence (CBI), though as stressed in the literature the two are conceptually distinct and need not necessarily co-exist even when the regulation and supervision functions and the monetary policy functions are vested in the same authority (see see Lastra,1996, Taylor & Fleming (1999), Quintyn & Taylor,2002).[51] RSI refers to independence of the regulatory and supervisory structure from not only the government but also from the industry and financial markets. In a sense, RSI is to financial

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[48] Calomiris, C.W. & A. Powell (2000), 'Can Emerging Market Bank Regulators Establish Credit Discipline?*', The Case Of Argentina 1992-99, NBER Working Paper No*. 7715. Evanoff, D. & L.Wall (2000), 'Subordinated Debt and Bank Capital Reform', *FRB Atlanta Working Paper No*. 2000-24

[49] Jagtiani, J. and C. Lemieux (2001), 'Market Discipline Prior to Failure', *Journal of Economics and Business*, 53, 313-324.Evanoff, D.D. and L.D. Wall (2002), 'Measures of the Riskiness of Banking Organizations: Subordinated Debt Yields, Risk-Based Capital, and Examination Ratings', *Journal of Banking and Finance* 26, No. 5, p. 989-1009. Sironi, A. (2003), 'Testing for Market Discipline in the European Banking Industry: Evidence from Subordinated Debt Issues', *Journal of Money, Credit & Banking, 35, p.443- 472.*

[50] Cukierman, A. (1992), 'Central Bank Strategy, Credibility, and Independence: Theory and Evidence', Cambridge, MA: The MIT Press. Beechey, M. J., B. K. Johannsen, and A. T. Levin (2008), 'Are Long-Run Inflation Expectations Anchored More Firmly in the Euro Area Than in the United States?', *Federal Reserve Board*, DP 2008-23. Bernanke, Ben (2009), 'The Federal Reserve's Balance Sheet: An Update', speech delivered at *Federal Reserve Board Conference on Key Developments in Monetary Policy*, Washington, 8 October.

[51] Lastra, R., (1996), 'Central Banking and Banking Regulation', London, UK: Financial Markets Group, London School of Economics. Taylor, M. and Fleming, A. (1999), 'Integrated Financial Supervision: Lessons of Scandinavian Experience', in *Finance and Development*, December 1999, IMF, pp.42- 45. Quintyn, M. and M.W.Taylor (2002): 'Regulatory and Supervisory Independence and Financial stability', *IMF Working Paper No. WP/02/46).*

stability what CBI is to monetary stability. Unfortunately the academic literature on regulation has been almost exclusively focused on CBI, to the virtual neglect of RSI.

The neglect of RSI assumes importance when one considers the fact that almost all episodes of financial distress have been associated with a weak RSI (See De Krivoy, 2000, for the Venezuelan experience of the mid-1990s, Lindgren et al., 1999 for the East Asian experience, Hartcher, 1998 for Japan, etc.)[52]. In India the financial regulatory and supervisory functions are distributed between the RBI (banks and NBFCs), state governments (for co-operative financial institutions jointly with RBI) and NABARD (for RRBs). For the purpose of this discussion, let us confine ourselves to the regulation and supervision of the banking sector and the NBFCs. The RBI discharges this function under the guidance of the Board for Financial Supervision (BFS), which comprises four directors from the RBI's central board, the RBI governor (as chairman) and four deputy governors.

In so far as independence from the government on the regulatory and supervisor fronts is concerned, this is ensured to a large extent by the fact that the RBI (acting under the guidance of the BFS) is authorised to issue directives in all areas of regulation and supervision. However, this realisation has to be tempered by the fact that an element of indirect control of the government does exist by virtue of the fact that the RBI directors (from whom four of the BFS members are drawn) are appointed by the central government. Incidentally, the CFSR's recommendation to set up the financial development council under the chairmanship of the finance minister 'for macro-economic assessment and development issues' (Proposal 26), if implemented, will strongly limit the existing independence of the regulators and supervisors, as it will provide a legitimate platform for the finance ministry to intervene in these matters, and further exacerbate the co-ordination problems between the RBI and the finance ministry.

But the other major dimension of RSI, viz., independence from markets, is equally important but has not received the attention it deserves. In the words of a very famous US central banker '...it is just as important for a central bank to be independent of markets as it is to be independent of politics' (see Blinder,1997).[53] Independence from markets is more difficult to ensure than independence from politicians, since the forces operating here are extremely subtle. This can occur primarily through two channels, both of which have been operating in the Indian context. First, an overrepresentation of financial sector and corporate representatives in high-level official committees and bodies, concerned with the designing of regulatory and supervisory frameworks. This usually takes place at the instance of a government strongly committed to reforms, and is usually done with the ostensible purpose

[52] De Krivoy, R. (2000), 'Collapse: The Venezuelan Banking Crisis of 1994', *Group of Thirty,* Washington, DC. Lindgren, C.T. Balino, C. Enoch, A. Gulde, M. Quintyn and L. Teo (1999), 'Financial Sector Crisis and Restructuring: Lessons from Asia', Washington, DC: IMF. Hartcher, P. (1998), 'The Ministry: How Japan's Most Powerful Institution Endangers World Markets', *Harvard Business School Press*, Boston: MA.

[53] Blinder, A.S. (1997), 'What Central Bankers Could Learn From Academics – And Vice Versa', *Journal of Economic Perspectives,* vol. 11 (2), p.3-19.

of taking on board the 'financial industry's' point of view.[54] Second, most media outlets are under corporate ownership with editorial/broadcasting functions not sufficiently independent of proprietary control. As a result, large sections of the media are strongly aligned with corporate sector interests and are usually successful in setting up a *grading system* in which supervisors and regulators are routinely rated publicly on how friendly they are to markets. Inherent in such an arrangement is the danger of ultimately having a regulatory authority overtly sensitive to financial market demands to the relative neglect of prudential considerations of financial stability.

VI. Conclusion

While there is no denying of the fact that financial system development is an integral component of overall development, there are important caveats to this general statement. The current financial crisis has exposed some clear fault lines in unchecked financial innovation and deregulation. In particular, opinion seems to be swinging away from the pristine view of free markets evident in classical laissez faire, to the more nuanced view of Keynes' *General Theory*. This shift in thinking has challenged several established orthodoxies and, as economists grapple to resolve their controversies, policymakers are struggling to find solutions to hitherto unencountered problems. Robert Posner's recent article[55] is an honest admission of the profession's confusion, wherein he says: 'We have learned since September that the present generation of economists has not figured out how the economy works. The vast majority of them were blindsided by the housing bubble and the ensuing banking crisis; and misjudged the gravity of the economic downturn that resulted….By now a majority of economists are in general agreement with the Obama administration's exceedingly Keynesian strategy for digging the economy out of its deep hole.'

But as the global economy is slowly emerging from the crisis, certain things are becoming clear -- in particular the inconsistencies in regulatory systems across countries and clear conflicts of interests between regulators across borders as well as between regulators and financial markets. A new era of global financial coordination to deal with global systemic risks seems to be dawining. But this will have to contend with four formidable and fundamental issues, viz.,

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[54] As a matter of fact, if this were the sole purpose, it could be easily accommodated by calling in such representatives as observers or witnesses and recording their testimonies. As a notable but by no means isolated example of this tendency, we may mention a recently appointed high-level committee for 'Promoting Financial Inclusion', with the Reliance Industries head, Bharti head, ICICI Bank MD and CEO, HDFC chairman, Infosys chief mentor, chairman emeritus RPG Group and Bajaj Group and Motors Proprietor as members and the finance secretary as member secretary. Note that the committee does not include a single professional economist!

[55] A. Posner, 'How I Became a Keynesian', *The New Republic,* (23 September 2009), http://www.tnr.com/print/article/how-i-became-keynesian. Accessed on 21 March 2011.

i. *the coordination of regulations;*
ii. *coordination of resolution tools;*
iii. *coordination in depositor and investor protection;* and
iv. *enhanced information sharing*.

The global co-ordination process would essentially involve four main partners, viz.,

i. national regulatory and supervisory authorities;
ii. IMF;
iii. financial stability board (FSB) and other international standard setting bodies – Basel Committee On Banking Supervision (BCBS), International Organization Of Securities Commissions (IOSCO), etc.;
iv. influential groups like G-20.

The success of the global co-ordination process would depend upon how sincerely these four main partners execute their respective mandates.

In line with the post-crisis shift in global thinking on the regulation of financial markets, there was a realisation of issues on regulation, supervision and market discipline in the EME context, too. As a matter of fact (see Table 2 above), the South Asian regulatory and supervisory system measures up fairly well against the benchmark norms recommended by the G-20 in March 2009. Nevertheless, there are three major unresolved issues on the regulatory and supervisory front. The first of these pertains to the principles versus rules-based regulation controversy. We have tried to establish the general point that whatever the merits of a principles-based system in the long run (and even these are doubtful), any transition to such a system in the medium term could pose severe strains on the legal and regulatory resources of countries in the South Asian region. A more promising and safer course of action would be to make the existing (rules-based) system more flexible and dynamic.

The second issue pertains to the role that market discipline can play in a newly deregulated financial system. Market discipline is generally regarded as a useful and even necessary supplement to official regulation, though of course not a substitute for it. Unfortunately, in many EMEs (including India) the ability of shareholders and bondholders to respond appropriately to changes in bank fundamentals is seriously constrained by the relatively shallow and underdeveloped nature of financial markets. This leaves depositors as perhaps the sole source of market discipline. Even though a few studies in the Indian context do find an important role for depositors in disciplining banks, the ability is limited by the prevailing system of a flat rate deposit insurance premium. From the point of view of strengthening market discipline in general, as a minimal step, it may be worthwhile switching over to a risk-

based premium deposit insurance system. Such a move, however, would require some political will, in a typically South Asian context, in which the cooperative bank network is extensively influenced by local political organisations and subject to the 'dual control' of the central bank and state governments.

Finally, we discuss the crucial issue of independence of regulators and supervisors from official (government) interference and market 'noise', in executing their mandate of financial stability. While both aspects of independence need special attention in almost all countries, the need for such independence becomes paramount in the South Asian context, in which the links between governments and industry have been very close, especially as the so-called *market friendly reforms* have often tended to be more *pro-business* than *pro-markets* (see Kohli (2006)[56] and in which consequently the lobbying efforts of large industrial groups could easily result in *captive* regulatory systems.

The future success of financial reforms in South Asia will be crucially contingent upon how successfully the regulatory architecture adapts to the twin dictates of financial development and financial stability, the extent to which market discipline can be usefully deployed as a pillar to support this architecture and the degree to which regulatory and supervisory independence is not comprimised.

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[56] Kohli, A. (2006), 'Politics of Economic Growth in India, 1980-2005: I & II', *Economic and Political Weekly*, 1st and 8th April.