THE FUTURE OF FINANCIAL LIBERALIZATION IN SOUTH ASIA

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This paper overviews financial liberalization in three South Asian countries — Bangladesh, India and Pakistan — in order to derive lessons for future reforms. It investigates how freeing domestic financial markets, improving capital account convertibility, and restructuring regulations have impacted the process of financial liberalization in South Asia. The paper shows that the capital account was most liberalized in Pakistan, and that Bangladesh had the least market development of the three countries under consideration. The study also reveals that of the two similar-sized countries (i.e. Bangladesh and Pakistan), Pakistan had experienced several financial crises that had required "external rescue". Bangladesh, in contrast, needed external rescue only once. India did better than Pakistan and Bangladesh, most likely because it followed a strategic plan according to which full capital account liberalization followed the deepening of domestic markets and improvements to government finances. The experience of the global crisis validated the Indian strategy and demonstrated that foreign entry, while beneficial, cannot resolve all issues. We conclude that deepening domestic markets and better domestic and international regulation are necessary prerequisites for full convertibility, and that these preconditions will be best met if future liberalization is adapted to domestic needs such as financial inclusion, infrastructure finance, and market deepening.

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I. INTRODUCTION

Financial liberalization, in broad terms, means giving a greater role and more freedoms to markets. International institutions such as the International Monetary Fund (IMF) that pushed for liberalization in the 1990s, defined it as removing government controls on the pricing and allocation of credit, and on the movement of international capital (Pill and Pradhan, 1997).

Before the start of the reform period in the 1990s, South Asia was characterized by severe financial repression. Financial markets had little freedom, and the aim of a plethora of controls was to make funds available for different government programmes. The government fixed most interest rates and the exchange rate. There was scarcity and rationing of foreign exchange. Neither the current nor the capital account of the balance of payment was convertible.

The fiscal reforms were expected to increase the availability and reduce the cost of finance, especially to the private sector. While the direction of reform was accepted, there was an active debate on its pace and content. In India, for example, those who advocated for faster reform wanted more market-led innovation, an end to distortions that raised costs, and the chance to develop India as a centre for financial services, given its skilled manpower (Rajan, 2009). In contrast, those who favoured a slower pace were concerned about asset bubbles in narrow domestic markets, crises from volatile flows, fiscal vulnerability, Dutch disease and appreciation hurting exports (Nachane, 2007; Sen, 2007). In general, preconditions for free capital movements included improvements in government finances, balance of payments and market institutions. With regard to India, two government committees were responsible for establishing these preconditions (see RBI, 1997; 2006).

This paper argues that the path to successful financial liberalization involves (a) freeing domestic financial markets and deepening them, (b) increasing capital account convertibility, and (c) restructuring regulation**.** As controls are withdrawn, effective regulation has to replace them. Since the pace and content of reforms varied across South Asian countries, evaluating South Asian financial reforms on these three strategic variables offers useful lessons for the ongoing process of financial liberalization, which are detailed in this paper. Lessons are also drawn from the development of the South-East Asian financial sector, and the ongoing rethinking of regulation after the global financial crisis (GFC).

The paper shows that reforms freed markets and developed underlying institutions in South Asia, and that the reform process was gradual with graded restrictions on foreign entry. Neither the countries with the maximum foreign entry nor those with the least market development were the most successful. India, with a balanced combination of domestic market/regulatory development and opening out avoided domestic crises, and survived the global financial crisis with minimal impact. India's policy strategy of "middling through" involved a sequence whereby full capital account liberalization followed the deepening of domestics markets and the realization of better government institutions and finances.

The India experience shows that opening out can be "too little or too much". More openness created more volatility, which was generally beneficial. If one accepts that position, the future path of financial reform will require the strategic removal of controls according to domestic requirements and in step with continuous development of domestic markets. This paper points out the implications of that perspective for the further reform of India's financial sector, and in the structure of regulation.

In what follows, the paper is structured in seven sections. Section II gives an overview of the process of financial liberalization. Section III discusses its consequences for the balance of payments, the impact of global crises, and presents lessons from broader Asian experiences. Section IV links the path of future liberalization to critical development imperatives. Section V gives a snapshot of domestic development issues in the financial sector. Section VI brings out lessons for the structure and reform of regulation. Finally, section VII presents the conclusion.

II. FINANCIAL REFORM IN SOUTH ASIA

Financial reform in South Asia began in the early 1990s (World Bank, 2005; ADB, 2009).[1] Liberalization was extensive, but remains incomplete even after more than twenty years. We evaluate reform in three South Asian countries with a focus on the three aspects of liberalization: domestic market development, opening out, and restructuring of regulation. The analysis begins with India, moves on to Pakistan and concludes with Bangladesh.

[1] Reforms began at different dates. In Pakistan reforms were started in late 1989 with the aim of improving monetary transmission through financial markets (Khan, 1994). Bangladesh privatized one of the five state-owned banks in the 1980s (ADB, 2009). Problems with the balance of payments forced Indian reforms to begin in 1991. The analysis builds upon earlier work. More references are available from www.igidr.ac.in/faculty/ashima/. Facts and figures quoted, unless otherwise mentioned, are from IMF, the Reserve Bank of India, Ministry of Finance (GOI), the State Bank of Pakistan and Bangladesh Bank websites.

India

Since the early 1990s, the beginning of the post-reform period, many changes have taken place in India's macroeconomic framework. Among the most salient, tight controls on financial markets were relaxed, and new technology was used effectively to create electronic markets that reached and sometimes exceeded international benchmarks. Along with traditional oversight, advanced risk management systems promoted transparency, efficiency, safety, and market integrity. Practices included online monitoring and surveillance, positions limits, margin requirements, and circuit filters. During the reform period, markets were able to handle large global volatility without serious problems (Goyal, 2010b). After 2000, foreign exchange (FX) and money markets saw rapid developments. As established firms began raising credit abroad at cheaper rates, banks turned to retail credit, and consumer durable and housing finance expanded. Legislation aided loan recovery and fledgling credit bureaus made credit histories available. Collectively, these developments contributed to an expansion of credit and a reduction in non-performing assets (NPAs).

After an initial double devaluation of the Indian exchange rate in June 1991, the exchange rate regime became a managed float. The Reserve Bank of India (RBI) intervened to prevent excess volatility, accumulating or releasing foreign exchange largely through public sector banks. The degree of flexibility and market determination increased as FX markets deepened.

The financial reforms established current account convertibility in the 1990s, but convertibility of the capital account was a gradual process. Liberalization distinguished between types and direction of flows and was much greater for equity flows than for debt flows, including bank loans and intermediary transactions, and for foreign compared to domestic residents. FX requirements for current account transactions of residents were liberalized before their investment outflows. Among debt inflows, the aim was to liberalize long-term debt before short-term debt.[2] In the Indian situation, deregulation was selective in order to give domestic markets time to develop. Foreign participation had provided competition and learning but was

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[2] The rationale for this sequence was that since equity shares risk, the liabilities the country faces are lower in a crisis. In contrast, domestic resources required to service secured foreign debt rise as the currency depreciates in a crisis. Similarly, domestic currency loans by foreign investors are preferable to domestic entities borrowing abroad since in the first foreign lenders bear the currency risk; in the second it lies with the domestic borrowers. In India, capital flows could come in through foreign institution investors (FIIs) or their sub-accounts registered with the regulator. Even in 2011 restrictions on debt were much tighter than on equity flows. While a FII could invest up to 10 per cent of the total issued capital of an Indian company, the cap on aggregate debt flows from all FIIs together was $1.5 billion. Source: http://investor.sebi.gov.in/faq/foreign%20institutional%20investor.html.

restricted until markets had reached sufficient maturity to be able to handle more volatility (Goyal, 2011).

After 2000, foreign exchange and money markets saw rapid developments. Many types of controls on FX transactions gave way to market-based regulation. A rule-based system that largely relied on self-certification replaced the cumbersome administrative procedures that required multiple discretionary approvals. The RBI continued as the regulator of banks. New financial regulatory institutions, which were set up during the post-reform period in India, included:

- the Securities and Exchange Board of India (SEBI) (the capital market regulator);
- the Insurance Regulatory and Development Authority (IRDA) (the insurance regulator);
- the Forward Market Commission (FMC) (the commodity futures trading regulator); and
- the Pension Fund Regulatory and Development Authority (PFRDA) (the interim pension regulator).

A 2006 amendment to the RBI Act expanded its regulatory powers beyond banks to cover the financial system as a whole and gave guidance to all of the agencies that were active in the markets, although SEBI had the major responsibility.

Pakistan

Financial reforms freed Pakistan's domestic financial sector from severe controls that were impeding growth. The statutory liquidity requirement (SLR) for banks was brought down from a high of 45 to 20 per cent of total demand and time liabilities. Caps on maximum lending rates of banks and non-bank financial institutions (NBFIs) for most trade and project related modes of financing were removed in 1995. Caps and floors on minimum lending rates were abolished in July 1997. Banks and NBFIs were able to set their lending rates in relation to the demand/ supply conditions in the market. Monetary policy began to use indirect tools such as open market operations, discount rates. Domestic interest rates on lending dropped to 5 per cent from 20 per cent.

Pakistan declared full current account convertibility in 1994, a few years after India did. While convertibility remained partial on the capital account, Pakistan was the most aggressive in freeing restrictions on international capital movements (both Bangladesh and India took a less aggressive approach). As reforms progressed, foreign banks were allowed to bring in and take capital out. In addition, they were allowed to remit profits, dividends and fees without any prior approval. The corporate sector was permitted to acquire equity abroad. Resident Pakistanis could open foreign currency accounts with banks in Pakistan, freely transferable abroad, exempted from income and wealth tax, with no questions about the source of foreign exchange. Foreign investors could purchase up to 100 per cent of equity in industrial companies with full repatriation allowed. Shares could be exported and the remittance of dividend and disinvestment was permissible without prior approval of the State Bank of Pakistan (SBP). Income tax treatment of foreign private investment was at par with similar investment made by local citizens. There were no restrictions on foreign banks.

After 1998, with the exception of a few specific industries, reforms of the financial system in Pakistan included privatization of and free foreign investment in state-owned enterprises. Foreign investors were given permission to retain 100 per cent equity in a company with no obligation to go public; they had permission to bring in any amount of foreign currency and to take it out freely.

Pakistan adopted a market-based unified exchange rate system on 19 May 1999. Since 2001, despite its preference for a floating rate, SBP attempted to maintain the real effective exchange rate at a competitive level. SBP intervened from time to time to keep stability in the market and smooth excessive fluctuations.

The creation of Securities and Exchange Commission of Pakistan by an Act in 1997 aimed at establishing a professional agency that would improve the regulation and supervision of the securities market. It became operational in 1999.

Bangladesh

During the post-reform period in Bangladesh the financial sector strengthened, but government interventions, in the form of ceilings, moral persuasion, and directed credit continued. Accounting and reporting was non-transparent. By 1997, banks were free to fix rates of interest on their deposits of different types after withdrawal of restriction on the floor rate of interest. With the exception of the export sector, banks were also free to fix their rates of interest on lending, which had been set at 7 per cent per annum from 10 January 2004. The statutory liquid requirement changed in the 2000s but was on an average around 20 per cent.

Bangladesh declared full current account convertibility in 1994, but restrictions on international capital movements were more stringent in Bangladesh than they were in neighboring India and Pakistan. For example, resident-owned capital was not freely transferable abroad. Required approval from Bangladesh Bank (BB) was given only sparingly. Even current settlements, beyond certain indicative limits, were subject to *bona fides* checks. Direct and portfolio investments of non-residents, capital gains and profits/dividends were, however, repatriable abroad.

On 31 May 2003, Bangladesh adopted a flexible exchange rate regime. Under the new regime, BB did not interfere in the determination of exchange rate, but operated monetary policy to minimize extreme swings in the exchange rate that could have had adverse repercussions. In the FX market, banks were free to buy and sell foreign currency in both the spot and forward markets.

As the above discussion shows, liberalization paths were similar in South Asia. However, Pakistan had the most open capital account, while in Bangladesh continuing controls restrained financial deepening. Even so, during this period, countries in the region experienced considerable institutional and market development. Easier entry saw many private and foreign banks and mutual funds entering the financial sector. Restructuring, computerization and competition improved banking services. More interest rates became market determined. In 2012, in India, only interest rates on government small savings and providence schemes were still fixed by the regulator. But in South Asia, as in Asia more generally (see table 1), the debt market remained underdeveloped. Yield curves existed but thin markets made benchmark rates unsatisfactory. More market deepening was required. The next section examines the consequences of the financial liberalization process that began in the early 1990s.

III. CONSEQUENCES OF FINANCIAL LIBERALIZATION

As discussed in section II, the post-reform period in South Asia saw many changes. In this section the consequences of financial liberalization in India, Pakistan and Bangladesh are illuminated. As we shall see, those consequences were similar in all three countries. Output growth rose, but so did volatility, and opening out coincided with a period of major international financial crises. However, a pattern of conservative regulation and “the gradual approach” prevented the financial sectors in each country from undergoing a crisis. A key consequence was greater mobility of various types of capital flows.

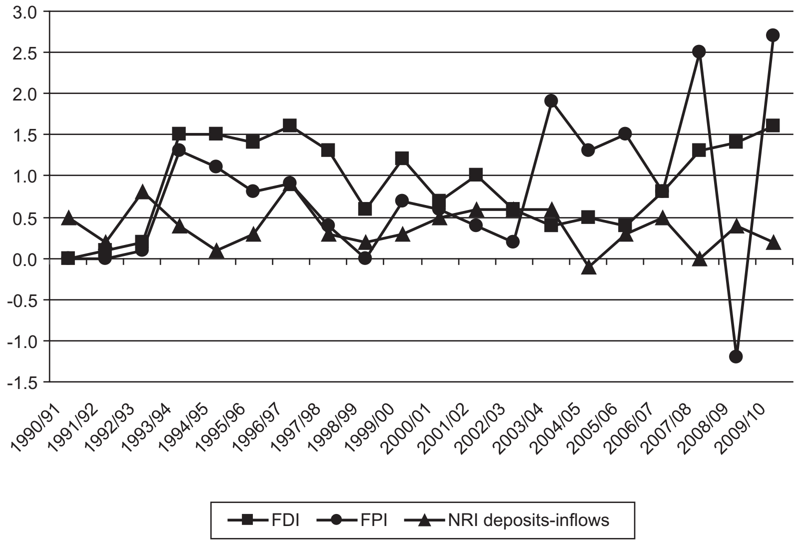
India

Different types of foreign investments[3] (FIs) from the private sector behave differently and therefore need to be analysed separately. Figure 1 gives some

[3] These include foreign direct investment (FDI), foreign portfolio investment (FPI) and other long- and short-term investment flows.

categories of inflows as a percentage of gross domestic product (GDP) and illustrates how capital flows were impacted as a consequence of liberalization. It shows that as inflows rose in India, the pattern of volatility differed among various components: foreign direct investment (FDI), foreign portfolio investment (FPI) and non-resident India (NRI) flows.

Figure 1. Capital flows in India

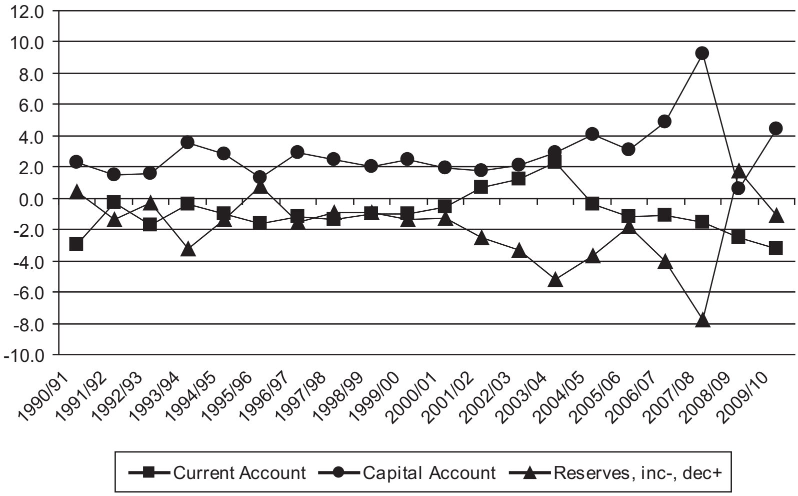


Source: Author's calculations based on data from RBI. Available from www.rbi.org.in.

There was steady acceleration in absolute levels of FDI, which is an equity-type flow since it shares risks, and higher levels continued despite the global crisis. Figure 1 also shows how the absorptive capacity of the economy increased. At the beginning of reform, $3 billion was about 1.5 per cent of GDP in the figure; $29 billion in 2007/08 reached a similar ratio. The ratios were similar since GDP had increased. Gross inflows were even higher since Indian firms were investing abroad. Figure 1 reveals that FPI fluctuated, turning briefly negative during the East Asian financial crisis (1998-1999) and during the global financial crisis (2008-2009). It can be seen that NRI flows responded to opportunities for interest rate arbitrage, but NRI deposit rates were capped when Indian interest rates were much higher than international interest rates, as for example from 17 April 2004, so that NRI inflows fell. This restricted arbitrage. The NRI deposit caps were strategically removed in 2011 when India needed more capital inflows than were coming in during the European debt crisis.

Figure 2 shows how liberalization impacted India's balance of payments. It demonstrates how reserve accumulation was the mirror image of the capital account. Volatile capital flows were absorbed as reserves,[4] instead of being used to finance a wider current account deficit (CAD). The CAD was restricted to about 1 to 2 per cent of GDP. Reserves provided self-insurance, and damped volatility of the exchange rate, but came at a cost. Since reserve accumulation was sterilized to maintain money supply growth targets, RBI's holdings of Indian Government bonds decreased while those of foreign government bonds increased. The interest on Indian bonds was higher than on assets the RBI held abroad, imposing large interest costs that were shared by the government, RBI and banks.

Figure 2. India's balance of payments



Source: Author's calculations based on data from RBI. Available from www.rbi.org.in.

Global depository receipts (GDRs) allowed firms to raise equity abroad; relaxation of external commercial borrowing (ECB) norms in 2006 allowed them access to cheaper foreign loans. Positive interest differentials and expected exchange rate appreciation created incentives to borrow abroad. Restrictions such as eligibility criteria, caps, minimum maturity period and end use criteria prevented excessive

[4] India's foreign currency reserves peaked at $315.7 billion in June 2008 and fell to $262 billion by the end of March 2009, but even then they exceeded India's foreign debt by $22 billion. Although outflows were $20 billion, much of the fall was due to valuation effects.

borrowing in response to domestic distortions, even while selective relaxation for longer-term debt increased credit availability for large corporations and funding of infrastructure.

In India, in the wake of reforms, partial capital convertibility provided additional policy flexibility; controls could be fine tuned in response to circumstances. Additional instruments were available to control the money supply and manage exchange rates, which was difficult to do with a more open capital account. Consequently, monetary policy had some autonomy even under conditions of volatile capital inflows. For example, stricter end use criteria were imposed for firms bringing funds in during periods of excessive inflows, and banks net-open-position limits were reduced when all of the banks were taking long positions on the dollar in 2011. There were more restrictions on intermediaries than on end users. Since inflows may not come in if they are not allowed to go out, it is difficult to restrict them. Continuing restrictions on domestic capital outflows, however, reduced the reserve cover required. In post-reform India, as reserves accumulated, selective easing of outflows by domestic residents and further trade liberalization were used as another way of absorbing inflows.

A major problem for India was that it had a CAD, and inflows were necessary in order to finance it. If inflows fell due to external shocks, such as the GFC and the European debt crisis, then the currency would depreciate if the Central Bank did not smooth demand and supply. Capital inflows do not always reflect domestic fundamentals, and so allowing them to determine the exchange rate can cause it to deviate from the level that is necessary to give a low CAD. More appreciation, for example, increases net imports and the CAD. Therefore, persistent current account deficits imply limits to appreciation.

The CAD is also affected by macroeconomic policy since it is the excess of domestic savings over investment. Macroeconomic policy affects the investment savings gap and therefore the extent of inflow absorption, which also depends on a general rise in absorptive capacity. Reducing the gap between domestic and foreign interest rates reduces some types of inflows and increases domestic investment. In the Indian case, the small CAD implied that the contribution of foreign savings to financing domestic investment remained small, even though foreign savings did contribute to relieving specific constraints on financing.

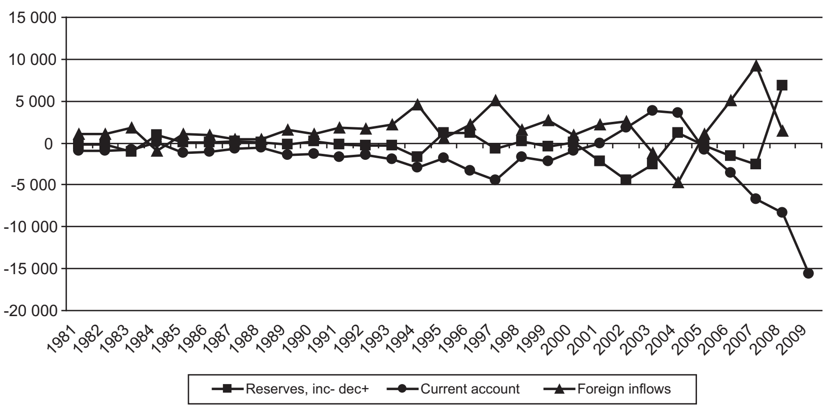
Pakistan and Bangladesh

Unlike the Indian case,[5] in Pakistan and Bangladesh the change in reserves was not the mirror image of capital inflows (see figures 3 and 4, both in US dollars). There were two reasons for this. First, since the current account was much more volatile, reserves had to be frequently used to finance it. Second, inflows were not so substantial and, at least for Pakistan, were often the result of IMF loans. As figures 3 and 4 reveal, Bangladesh saw a sharp improvement in its balance of payments after 2005, while for Pakistan the reverse occurred.

Asia

It is useful to sketch how financial liberalization impacted Asia in general. Financial liberalization in South Asia was late in coming. By the time the reforms took place in South Asia, many other countries in Asia had already undergone reform. With the exception of Malaysia, several of the smaller, more trade dependent Asian countries had already attained more or less open capital accounts by the 1990s (e.g. the Republic of Korea). In these countries debt and equity type inflows were liberalized as part of the reforms in the 1990s (BIS, 2003). Since government debt and deficits were generally low in East Asia, firms and banks were borrowing abroad. In

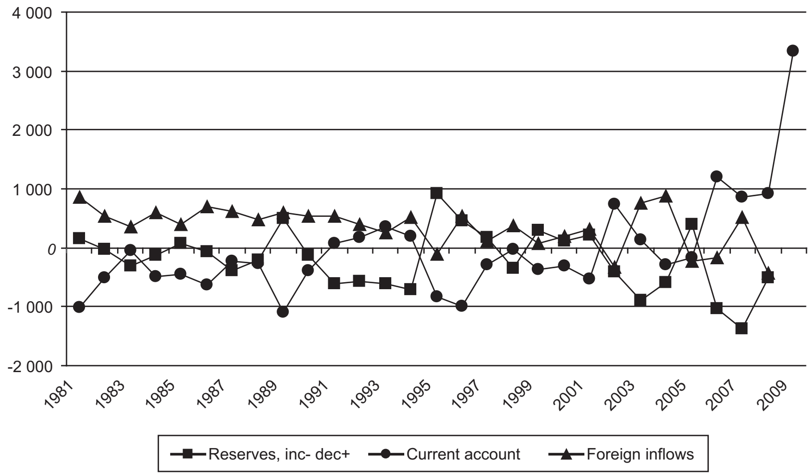
Figure 3. Pakistan's balance of payments



Source: Author's calculations based on data from SBP. Available from www.sbp.org.pk/.

[5] Due to lack of data on capital flows they were derived as change in reserves plus current account deficit for Pakistan and Bangladesh.

Figure 4. Bangladesh's balance of payments



Source: Author's calculations based on data from BB. Available from www.bangladesh-bank.org/

the Republic of Korea, during its financial liberalization period, short-term inflows were favoured over long-term inflows. The rising ratio of short-term to total foreign debt made corporations and banks more vulnerable (BIS, 2003). External opening outpaced domestic financial market deepening. Regulatory, legal, accounting, and institutional gaps combined with government warranties from fixed exchange rate regimes led firms to ignore currency risk and take on excessive loans.

Among many countries in Asia, hype about the "Asian miracle" contributed to excessive lending. For example, prior to the East Asian crisis in 1997, Thailand had a CAD of 8 per cent and experienced a real estate bubble. High short-term debt aggravated outflows and bankruptcies during the crisis. However, many countries had gained so much from the process of globalization that they remained firmly committed to the process, and resolved to undertake whatever financial reforms were required to reach international standards. Foreign participation and entry contributed towards reaching those standards. Even after the GFC, that resolve remained unshaken (Lee and Park, 2010).

China was the major exception to capital account convertibility, and it retained many types of capital controls. It also differed from India in restricting FPI and liberalizing FDI relatively more.

Table 1 shows the outcomes across different financial sectors and Asian countries compared to advanced country benchmarks. A number of findings stand out. First, Asia has more deposit taking institutions compared to the West. Second, Asia lags behind much more in bond markets than it does in stock markets. Third, Indian stock markets have developed more than either its banks or bond markets, suggesting that its banks and bond markets need to develop more. In both Europe and Japan deposits as a ratio of GDP exceed that of market capitalization. This is an alternative strategy of financial development. Even if South Asia wants to follow such a strategy of developing banks more than markets, its deposit ratio is too low, and

Table 1. A comparative picture of financial systems (percentage of GDP)

	Financial sector assets							
	Deposit-taking financial institutions		Non-bank financial institutions		Stock market capitalization		Total bonds outstanding	
	2000	2009	2000	2009	2000	2009	2000	2009
Bangladesh*	46.8	62.0	0.7	1.7	2.4	14.4	..	17.1 [a]
China	157.5	200.6	5.1	15.8	48.9	82.7	16.9	52.3
India	64.5	103.5	15.6	29	69.9	205.2	24.6	48.8
Indonesia	63.6	34.7	8.7	11.4	16.2	39.8	31.9	18.2
Republic of Korea	130.5	158.6	41.9	67.3	27.8	100.3	66.6	122.7
Malaysia	154.2	211.5	41.4	99.9	120.6	149.5	73.3	96.5
Pakistan*	44.8	52.6	4.7	5.9	18.6 [b]	..	..	27.5 [a]
Philippines	99.2	83.1	23.9	20	33.3	53.6	27.6	39.2
Singapore	646.3	643.7	76.6	83.9	167.3	271.7	48	84.7
Thailand	132.3	146.6	10.7	41.1	23.8	67.1	25.3	67
Asia average	**181.1**	**197.8**	**28**	**46.1**	**63.5**	**121.2**	**39.3**	**66.2**
Euro zone	230.9	315.6	157.8	214.5	79.6	56.5	87.9	114.4
Japan	510.8	541.8	274.7	291.3	67.6	69.7	97.4	189.6
United States	79.6	107.9	279.3	314.1	152.1	105.8	138	175.8

Sources: ADB (2009); Lee and Park (2010), * except for Bangladesh source is www.imf.org/external/pubs/ft/scr/2010/cr1038.pdf; for Pakistan sources are: www.sbp.org.pk/bsd/10YearStrategyPaper.pdf, www.osec.ch/sites/default/files/PakistanBankingSector2011.pdf, and www.sbp.org.pk/reports/annual/arFY03/Capital%20Market.pdf.

Notes: [a] Government Bonds outstanding in 2005

[b] for 2003. The average excludes Pakistan and Bangladesh since the dates differ, the two years for Pakistan are 2001 and 2008, for Bangladesh 2002 and 2008.

needs to be raised. The strategy of developing banks more than markets may, however, no longer be viable (Lee and Park, 2010). After the GFC higher capital adequacy requirements may restrict growth from banks, which suggests that markets must grow more in developed Asia.

Asian intraregional trade accounts for about 50 per cent of total trade, but its intraregional financial integration is limited. In 2004 intraregional cross-border portfolio liabilities were 2.25 per cent of Asian GDP, while its liabilities to either North America or the European Union were more than three times as much (Jung, 2008).

The international crises that occurred from 1990 to 2010 tested the financial strategies of countries in Asia. As we shall see in what follows, some were able to withstand those crises.

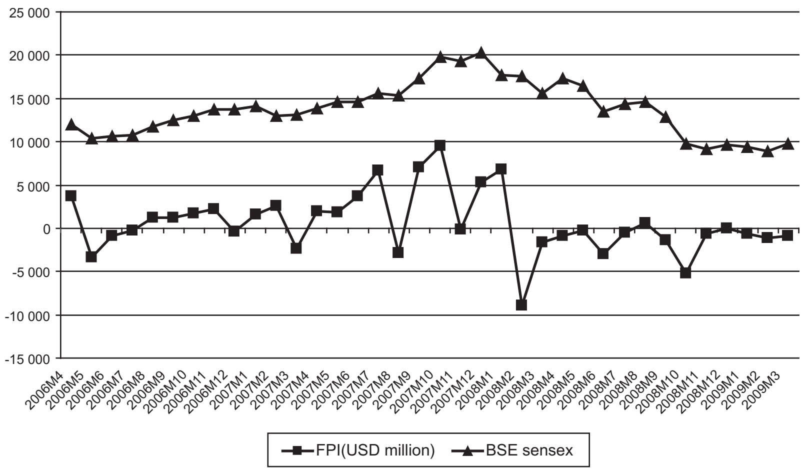
Withstanding crises

Foreign inflows did make more resources available, demonstrated better organization and technology, aided price discovery, stimulated local investment, and allowed better allocation of world savings. However, inflows to emerging markets (EMs) are subject to sudden stops/reversals due to infectious panics that may be unrelated to domestic fundamentals (Calvo, Izquierdo and Mejia, 2004). The GFC in 2008 demonstrated this, as did the European debt crisis in 2011, when capital flowed out of EMs due to external risks.

As can be seen in figure 1, Indian FDI was relatively stable compared to other types of inflows, suggesting that it is worth reducing hurdles to entry of FDI. FPI was volatile but, as figure 5 demonstrates, it was risk sharing. Figure 5 shows FPI inflows were three times larger than outflows for equivalent variation in market indices. As markets fell during outflows the value remitted was lower. In the two years prior to October 2007 the value of the stock index of Bombay Stock Exchange (BSE) rose from 8,000 to 20,000 and FPI inflows were $47 billion. Nonetheless, over the next year, as stock markets fell back to 8,000, outflows were only $15 billion. Thus, FPI is able to take out much less in bad times compared to what it brings in during good times.

FPI inflows benefited firms, despite higher volatility, since loans became easier to get and more venture capital entered. The ratio of gross investment to GDP rose from 25.2 to 39.1 in the high growth period of 2003-2008. FPI tended to resume after stock indices had corrected. Households did not, however, benefit since retail participation shrank. The share of household financial savings in shares and debentures post-reform was low at 5.1 per cent in 2005/06 compared to 23.3 per cent pre-reform in 1991/92. Before the GFC (2007/08) it had increased to 12.5 per cent;

Figure 5. India: FPI and BSE Sensex



Source: Author's calculation based on data from RBI. Available from www.rbi.org.in.

but post (2007/08) collapsed again to 2.6 per cent. The collapse was not only due to FPI related volatility; reforms had raised entry costs for the retail investor. Free foreign entry was allowed in mutual funds, but they focused on high-end customers and firms. Local pension funds had not grown adequately, and their exposure to stock markets was capped. The banked population itself remained low, so it was not surprising that exposure to stock markets was even lower. Despite the entry of new private banks, 60 per cent of the population remained unbanked.

Firms who were dependent on foreign trade and other short-term credit suffered severely as international credit markets froze. Even for long-term loans, reset clauses raised firms' costs as spreads widened. What this suggests is that firms must understand currency risk, and the interest differential between domestic and foreign loans must fall as a precondition for more liberalization of external borrowing.

Thus, foreign entry contributes, but it cannot, by itself, deepen markets. Other conditions also have to be in place. Eventual internationalization of Indian financial services is required as Indian companies go global. However, the sequencing has to be correct (RBI, 2006). Considerable deepening of equity markets and improvements in regulation has taken place but markets are still not broad based. Given the high domestic savings ratios, a larger percentage of household savings going to markets would make them more stable, as well as meeting investment needs without too large and risky an expansion in current account deficits.

Pakistan had a much freer capital account than Bangladesh. Taking 1995 as the reform date for the two countries, in the post-reform period Pakistan received help from IMF seven times.[6] In contrast, Bangladesh had only one arrangement with IMF, which was in 2003. India, which also retained capital controls and had more capital/ domestic market deepening compared to Bangladesh,[7] did not have to go to IMF at all after the early 1990s. This suggests that strategic controls—the gradual liberalization of inflows, capital/domestic market deepening and capital controls —were protective.

Some scholars regard a departure from full liberalization as a failure of reforms (Rajan, 2009). Yet, the above experience shows a carefully sequenced path predicated on domestic reforms maybe a better strategy of liberalization. The distinction between types of flows is useful and must be retained. The countries affected by the East Asian crisis had high short-term debt. Later, during the GFC, the Republic of Korea had built up a large stock of foreign currency reserves. The security of reserves led to high short-term debt, and attacks on the currency (i.e. the won) occurred (Capital, 2010). This suggests that short-term debt should be discouraged regardless of other buffers. Free foreign entry without the other harder preconditions could put a country at unnecessary risk.

The sharp rise in inflows to EMs after 2003 was partly an aberration due to regulatory weakness in developed countries, so self-insurance was the correct policy response. It was not arbitrage driven by the low interest rates of developed countries, since the latter were also rising. The federal fund rate in the United States of America peaked at 5.25 per cent in 2007. Instead, it was high leverage, due to softening of regulation for investment banks that enhanced capital flows in response to profit opportunities. When Lehman Brothers failed in 2008 its leverage was 30:1 compared to 15:1 for a commercial bank.

During the exit, in 2010, from the coordinated macroeconomic stimulus that followed the GFC, the West and EMs were in different phases of their macroeconomic cycle. Higher growth in EMs and the near zero interest rates at home led to portfolio rebalancing towards EMs. The promised tightening of global regulations was relegated to the future and large Western financial institutions were encouraged to improve their impaired profits through trading. The low interest rates and quantitative easing major Western Central Banks implemented created large flows of capital into

[6] There were two arrangements with IMF in 1997, and one each in 1993, 1995, 2000, 2001, and 2008.

[7] A review of the outcomes of the financial sector adjustment credit (FSAC), which Bangladesh contracted with the World Bank, done under the Structural Adjustment Participatory Review Initiative (SAPRI) in 2000 indicated that although reform implementation was satisfactory, desired outcome was not achieved.

EMs. They did not last, however, in periods of heightened global risk, such as the European debt crisis in 2011 during which FPI's rushed back to the United States.

A well-functioning Asian bond market (ABM) could reduce this type of instability. It would improve both domestic bond markets and intraregional financial integration; it would make the Asian financial system more balanced by encouraging markets as well as banks, providing alternative avenues for savings and sources for infrastructure investment, and recycling the region's large savings for regional long-term investment, thus reducing maturity and currency mismatches, and global imbalances, as dependence on capital markets in the United States would fall. Stable Asian savings would become available to finance large Asian infrastructure needs (for a similar view, see Jung, 2008).

Initiatives taken to further these aims include the establishment of the Asian Bond Fund (ABF), and the Asian Bond Market Initiative (ABMI). The ABF is a fund that comprises the foreign exchange reserves of regional member Central Banks (CBs); it aims to invest in regional bonds to contribute to the development of regional bond markets, and reduce dependence on dollar denominated assets. ASEAN+3[8] also seeks to strengthen regional markets through the ABMI, and build a common market structure that involves securitization, a credit guarantee, and a credit rating and settlement system essential for developing regional market interaction.

The 1990s crisis activated regional financial forums, even though there was no history of coordination in Asia. After the East Asian crisis Asian countries reformed their financial systems. Yet, reform of the international financial system (IFS) was not carried out (Goyal, 2010a). Consequently, Asia was pushed to adopt self-insurance and cooperation measures that improved its bargaining position and helped it survive the global crisis. The global financial crisis gave another push to efforts to promote regional financial stability, including multilateralization of the CB-reserve-pooling Chang Mai Initiative, making it more inclusive. South Asia is inadequately involved in these Asian initiatives, although dialogue has begun and needs to be pursued vigorously.

Capital account liberalization, deepening markets and improving government institutions and finance form a package. One alone is dangerous without the others. Empirical research has found that only countries with strong domestic institutions, markets and government finances benefit from foreign inflows (Chinn and Ito, 2002). These features determine absorptive capacity that reduces volatility and also gives countries the ability to withstand volatility. The global financial crisis showed that

[8] ASEAN+3 expands the grouping of ten small Asian economies comprising ASEAN to include China, Japan and the Republic of Korea.

stronger international financial architecture and regulation are preconditions for full capital account liberalization. Countries with more controls have a lower probability of undergoing a financial crisis (Ostry and others, 2010). The experience of withstanding crises has implications for policy.

Policy recommendations

Controls and prudential requirements are an essential line of defense. They can be designed to be market friendly.[9] Pure controls involve restrictions on cross border flows by residence. Market based controls include unremunerated reserve requirements and taxes. For debt pure controls must continue, but for portfolio flows the latter set may be considered, ideally as part of a global agreement on handling capital account distortions.

One argument made is that capital is successful in resisting taxes because taxes increase costs for countries that impose them. Nonetheless, just as prudential regulations are considered necessary for market stability, if cross border taxes contribute to crisis proofing they lower costs in the long run. Costs are also minimal if one country is not doing it alone (IMF, 2010).

Transparent, sequenced capital-account convertibility should follow domestic financial deepening and the ability of a country to absorb inflows productively, with the real sector as priority. The above arguments suggest that improvements in international financial regulation or regional arrangements would allow faster liberalization, since excessive risks under the current international monetary system delay further liberalization.

IV. DOMESTIC NEEDS AND FUTURE LIBERALIZATION

Domestic deepening is a precondition for further liberalization. The latter is likely to progress fastest in the directions that satisfy critical development needs. Since these are similar in South Asia lessons from the Indian case can be applied to the region as a whole. Critical needs for financial development in the region are inclusion, infrastructure financing, and more effective risk management in the derivatives markets.

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9 India has become a member of the Financial Action Task Force (FATF) against global terrorism and money laundering. Detailed electronic trails, linked information, and Know Your Customer (KYC) norms make it possible to discriminate between origins and types of flows together with central registration that reduces transaction costs.

Inclusion

Although inclusion has been a major aim, reforms that have sought to increase inclusion have not been very successful, perhaps because such reforms have not "casted a wide enough net." The idea of financial inclusion has to expand beyond the availability of credit to include banking, insurance and other financial services. Providers must be able to design a menu of services meeting lifecycle needs.

Financial institutions have been unable to leverage the shampoo sachet effect,[10] that is, to evolve a low denomination strategy that meets customer needs. Leveraging the shampoo sachet effect makes it possible to tap into huge potential numbers that make low margin/high volume a viable business model in India. In order to do so, systemic features that discourage small investors have to be changed, investor confidence must increase, and positive incentives must be offered. Possible measures to attain this goal should include:

- education of investors (increasing financial literacy)
- making one point credible information and suitable services available
- designing an ecosystem and service package to meet lifestyle needs
- reducing transaction costs in using technology for ease of entry and exit
- registering and rating of agents
- promoting simple, transparent, low-cost instruments, such as index funds and exchange-trade funds (ETFs)

Infrastructure financing

Poor Indian infrastructure is both a bottleneck and an opportunity. Spending on infrastructure is currently 6 per cent of GDP, and is expected to reach 9 to 12 per cent to finance $1 trillion over the twelfth Plan, 2013-2017. Long-term finance is required, and developing bond markets has some urgency in this context. More retail, pension funds participation, and limited investment by foreign investors in long-term rupee denominated bonds could make more long-term finance available. However, limits to entry of foreign capital into local currency bonds may still be necessary since structures can be created to index local currency denominated bonds to foreign currency or to make them payable in foreign currency, thus creating currency risk.

[10] A marketing strategy in India introduced small, and therefore low priced, one time use shampoo sachets as an alternative to larger shampoo bottles. It was a great success, leading to a large expansion in sales to lower income groups.

Currently, the maximum tenor of financing available is 15 to 20 years, and that is in limited quantities. New instruments such as take-out financing are beginning to be used to rollover short-term financing, and allow the exit of risk capital. After a project begins earning, other more risk-averse types of capital are willing to participate. Such instruments can facilitate the entry of such capital for infrastructure project financing. Experience has been gained in private-public partnership contracts with good incentive features. If well done, they allow allocation of tasks according to comparative advantage and of risk to parties best able to bear it.

Risk: derivative markets

Laying-off risk requires not only development of instruments and markets but also random movements in asset prices so that agents are not able to speculate on expected one-way movements. In thin markets, regulators sometimes have to create such movements, even while restraining excess volatility. Since firms cannot sell insurance to those who need it in imperfect markets, they may underinsure reversals of capital inflow. A well functioning bond market, for example, allows firms needing external resources to share their revenues with those with access to foreign funds (Caballero and Krishnamurthy, 2004).

Complex derivatives can be misused to create positions where the risk is non-transparent even to the holder. In 2007 many Indian firms entered into so-called "hedging deals", which were actually complex bets on the value of the Swiss franc. With the steep rupee depreciation in 2008 many firms lost money.[11]

Although one leg of every over-the-counter (OTC) trade is regulated in India, so that information is available to the regulator, it is not available to the market as a whole. Standardized exchange traded instruments have the advantage of simplicity and more transparency, so risks are known. Yet, currently, day trading dominates in many instruments partly since physical delivery is limited. Measures are required to increase contrarian positions, open positions and hedging. The crisis demonstrated the robustness of exchanges compared to other financial institutions. Worldwide no exchange failed since they had multiple risk-management systems that covered tail risks. Post crisis, internationally, moves were made to report more derivative trade on exchanges.

[11] Many newspapers carried such reports. See Gangadhar Patil, "India felt bolts of the sub-prime crisis", *DNA*, Mumbai edition, 25 April 25 2012, for a recent analysis. Available from www.dnaindia.com/india/report_india-felt-bolts-of-the-sub-prime-crisis_1680308.

V. TOWARDS ACHIEVING GOALS

This section illustrates the policies required to achieve the domestic goals of financial deepening and inclusion, in response to specific challenges in each sector.

Banks

Indian credit deposit ratios remain one of the lowest in the world. There is considerable scope for expansion. Indian banks, especially private banks, provide better services to large corporations and high-net-worth individuals. For example, when average loan rates for blue chips were 5 to 7 per cent they were higher at 9 to 11.25 per cent for micro- and small-enterprises (MSEs). Banks also participate in infrastructure finance, but do not have the scale and size to meet large financing needs. Regulators set exposure limits for each sector, which prevent excessive lending to any one sector.

New developments in technology offer many opportunities for inclusion. The very rapid growth in mobile usage, their wide penetration, the competition and dynamism of mobile service providers (MSPs) in designing new products, suggests permitting mobile financial services could enable rapid strides in financial inclusion. Transaction costs would fall for users. India has about 100 million migrant workers from central India who need to send remittances home. Their security would increase since they would no longer have to carry cash. A mobile-based product would make customers independent of agents. Business correspondents (BCs)—RBI's favoured mode of inclusion—would only be required for enrolment, cash deposit and cash withdrawal.

RBI, however, wants to give banks the opportunity to expand based on using new technology and their widespread agent network. In smart card technology, an agent is required for initiation of all transactions. Account details and the transaction data are stored on the smart card. However, banks involvement in mobile financial services has advantages such as provision of additional banking services, increasing access to credit, and raising the level of savings for those currently excluded from the formal financial sector.

Because the overarching goal is to expand financial services to the unbanked population, specific policies have included expanding permitted points of service for small value transactions, for example by allowing MSPs to function as BCs, regularizing pilot projects, reducing the reporting requirements to set up no-frills bank accounts, and subsidizing inclusion for the non-banked population.

By 2012, the approval for mobile banking transaction volumes remained low. Banks found end-to-end encryption costly, and wanted to avoid it for low-value transactions. They found entering into partnerships with MSPs difficult. There were conflicts on which party created the most value. In 2008/09 RBI removed encryption for amounts less than 5,000 Indian rupees. It also lowered reporting requirements, reasoning that small cards could not be used for terrorist financing. Therefore, it is possible to revise limits upwards to permit transactions for certain items, such as the purchase of an air-ticket.

RBI did permit non-bank entities to issue mobile-based prepaid payment instruments, based on representation from MSPs. Yet, the response remained poor. MSPs value-added services have yet to improve. They are interested in the financial float, but RBI views this as equivalent to deposit taking, which it was not willing to allow non-banks. Since deposit insurance cannot be extended to non-banks, deposits with non-banks create risk.

In order to make banking more inclusive, policies should be implemented that (a) find innovative and non-exclusive ways to leverage new technology to spread banking services widely; (b) build on large mobile user bases, and meet the needs of specific population segments such as rural migrant labour; (c) find points of service that create utility for consumers, such as small grocery stores as business correspondents that also offer limited credit; and (d) increase competition between alternative service providers. If banks take too long to make the necessary policy changes, alternatives should be explored to ensure inclusion. Since unbundling services and distributing across providers is more feasible now, more competition can be created in specific sectors.

Markets

Markets saw considerable progress but new issues came up over the reform years. A new stock exchange (NSE) was established to compete with the older BSE, but NSE soon became dominant with 85 per cent market share. In electronic markets physical distance does not matter, so the regional stock exchanges became defunct; like BSE, they could not compete. Electronic markets work like a network; costs fall in the one that is able to attract more customers, so others also find it in their interest to migrate and the equilibrium tips over. In the days of floor trading the greatest geographical clustering of financial intermediaries had the advantage. Yet, with ICT geographically dispersed intermediaries provide liquidity. The exchange with the best technology attracts the most customers. The governance structure of exchanges also changes to for profit corporations from a club of intermediaries distributing the rent among heterogeneous members. The latter does not work with dispersed membership. Profits help in improving technology, which is now the main avenue of competition. BSE switched to a corporate management structure, but was unable to compete with NSE's more modern processes. Aware of the possibilities of tipping in networks, the exchanges try to lock in customers in various ways.

The Security and Exchange Commission (SEC) in the United States has a "best-price" stock-handling rule to prevent such lock in and to maintain competition across exchanges. When the New York Stock Exchange (NYSE) was using favourable network effects to lock-in users, resist automation, and reward insiders, SEC leveled the playing field by allowing "fast" automated markets that execute trades automatically to bypass a better price on a "slow" exchange, within some limits.

Therefore, regulators have to be proactive to maintain competition. For example, the judiciary had to intervene in the famous Microsoft case. Competition alone was inadequate given Microsoft's ability to tie its software sales with hardware, thus locking in customers. SEBI was not proactive in this sense. NSE made large profits and rewarded management while the user base remained narrow. BSE had acquired a bad name because of the dominance of insiders, but that governance structure was a function of the floor trading system and changed with its passing. NSE had a clean image. Yet, without regulation corporations will try to lock in customers and create entry barriers to increase profits. In addition, without competition transaction charges will not come down for consumers. In 2011 the Competition Commission of India found NSE guilty of anti-competitive practices.

Policy responses to deepen markets and create more inclusion should maintain competition together with high standards in exchanges. This will force exchanges to create products and strategies to expand the current narrow user base—creating the best outcomes for users. Competition and self-regulatory standard exchanges in a network industry are important for profit corporations. Exchanges did demonstrate greater stability and transparency during the GFC. International regulatory changes will encourage more OTC business to migrate to exchanges, even as higher capital adequacy inhibits banks.

Equity

In 2010, trading in Indian markets was dominated by a few stocks, products, cities, and was largely short-term and cash settled. Only 1.5 per cent of the population was invested in markets; only 100 large cap stocks were liquid, with 90 per cent trading volume in the top 10 cities, and in equity and commodities (FOFM, 2010). Many instruments and exchanges were underperforming, and FPI inflows dominated equity markets.

Regulation removed the households' trusted distribution agents from the markets in favour of technology-enabled distribution. However, given the large job requirement in India, a technology-plus-people strategy may be more viable. Some big broking/brokerage houses are setting up large national chains with a good distribution network.

In 2010, an attempt was made to spread equity culture via mobile trading. At that time India had about 470 million mobile connections; dematerialized accounts for electronic trading of stocks (which indicate the number with the potential to actively trade stocks) amounted to 16 million users. Stock trading was already available through Internet banking. Brokers had to ensure secure access and encryption. The unique identification number used for Internet-based trading was to be applicable for securities trading using wireless technology.

To increase stability and inclusion, the following policies should be embraced: (a) leverage new technology for stable expansion of domestic equity participation, to reduce FPI dominated equity volatility; (b) generate more competition in exchanges to induce strategies for greater domestic inclusion; (c) create an ecosystem linking banks, markets and customers to effectively meet the needs of the latter; and (d) re-establish trusted technology-enabled distribution agents with local knowledge.

Fixed income markets

India had a high government debt of 60 per cent of GDP in 2012, but the Indian debt market was underdeveloped, as was the corporate bond market. The government securities (G-secs) market was deep, and the risk-free market returns were attractive, especially with concessions, such as a held-to-maturity (HTM) part, which was not marked to market, so that capital losses could be avoided. HTM was originally given to ensure banks would find it profitable to hold G-secs as the statutory liquidity requirement was brought down. As interest rates became market determined and rose from repressed levels, the capital value of G-secs fell. G-secs available for trade in 2010 reached 10.5 trillion Indian rupees, even after removing the HTM part. Retail holding was negligible, while banks normally held G-secs in excess of a still high statutory liquidity requirement of 25 per cent net demand time liabilities. Yet, secondary trade remained small. The ability to hold to maturity reduced incentives to trade and to hedge interest rate risks.

To develop the debt market, as two-way movement of interest rates is established, policy should consider gradual reduction in the HTM component. Wider institutional and retail participation should be encouraged. However, more government debt must be held by households in a domestic retail market before freer entry of foreign Indian rupee debt funds is allowed. The Greece sovereign debt crisis, and the post crisis explosion in government debts, suggests that risks associated with external holding of sovereign debt can be large. These risks include high interest rate volatility that the Indian system is not yet ready to face. Retail of G-secs will provide households with a well understood secure savings instrument, before they begin to trust fixed income funds. Inflation indexed bonds may help them migrate from holding excessive gold. Suggestions on domestic reforms to invigorate the corporate bond market include rationalizing stamp duty, incentivizing development of market makers, permitting pension type funds to invest in such instruments, taking measures to reduce the cost of issuing (e.g. simplifying disclosure documents for debt investments) and creating credit enhancement mechanisms.

Interest rate futures

Globally, exchange traded derivatives, have 81 per cent share, and interest rate futures (IRFs) dominate in these. However, in Indian markets the share was only 1 per cent in 2009. Attempts were made in 2003 and in 2009 to start IRFs in Indian markets but they did not succeed. There was correction of some design flaws, but problems such as insistence on physical settlement remained. Initially there was lack of liquidity in the underlying G-secs on which the derivatives were written, since only two long-term G-secs were permitted. The fundamental reason for the failure of IRFs is that players continue to take positions to benefit from expected interest rate movements rather than hedge risks to capital value. Since interest rate movements are largely predictable, this is the advice brokers give to clients.

Policy interest rate surprises and homeopathic doses of interest rate volatility would create a demand for IRFs. Repurchasing corporate bonds, wider holding of G-secs, a reduction in HTM, and more active trading in G-secs would create more users of IRFs. Development of one segment would encourage other segments.

FX markets

As in most countries of the world, OTC transactions conducted by banks had the largest share of FX transactions, with swaps being most widely used. Exchange traded futures were permitted in 2009 and saw rapid growth. Yet, limitations continued (e.g. they could not be settled in hard currency). Day traders dominated and open interest was low. The low contract size of $1,000 and absence of customization in futures made OTC the preferred option for large corporate deals. Even so, there was continuous development of FX markets. For example, futures in multiple currencies and options were allowed. RBI slowly shifted from the earlier focus on underlying exposures to also allow indirect hedging. FIIs were still not allowed the latter. As a consequence, the offshore market, which had provided them a hedging venue, grew and by 2011 exceeded the domestic market. Bank for International Settlements reported that Indian FX markets had the fastest growth rate among world markets although this slowed down after the global crisis. Even so, FX markets were still thin; large spikes could occur without CB intervention, especially given large capital movements in a currency that is not fully convertible.

In terms of policy, the above argument suggests that policy should strive for stable market development with the gradual removal of restrictions. Two-way movement of exchange rates, with movements limited to a moving 10 per cent implicit band will help develop markets and create the hedging habit.

The information presented above shows the direction of steady financial development that, if implemented, would support domestic goals.

VI. STRUCTURE OF REGULATION

The crisis gave lessons for the regulatory structure India should follow.[12] The regulatory failure in advanced countries was due to the dominant belief in market efficiency and self-regulation along with the comparative advantage the United States had in the financial sector. This generated political support for finance driven growth. Regulation was thought to have a cost in terms of compliance, loss of innovation, and higher cost of funds. As a result, regulatory standards were lowered.

Both regulators and markets bought into the dominant paradigm of efficient and rational markets where failures do not occur. Yet, markets, as well as regulators, did fail, suggesting that better incentives are required for markets, and that regulators should have discretion. Financial regulation must ensure the integrity of financial markets and do so in a way that meets the needs of the real economy. In addition to supervision, enforcement and rules, four basic market failures require regulatory intervention: failure of information, failure of inclusion, behaviour that creates procyclicality, and the “too big to fail” (TBTF) syndrome. The market instability due to the European debt and the United States downgrade in 2011 made it clear that pumping up financial markets, in and of itself, does not deliver a sustained recovery.

The repeated crises may help discover the right combination of regulation and markets. Regulatory discretion invites excessive restraints, corruption and regulatory capture. However, rules need to incentivize better behaviour, moderating the basic market failures identified. A complex enough (or principle based) rule can be

[12] This section is based on Goyal (2010b; 2012).

consistent with the basic principles, yet ensure prompt response reducing delays and regulatory forbearance. A combination of micro- and macro-prudential regulation can usefully moderate the failures. If regulation induced better outcomes through creating correct incentives for market participants it would enhance safety without crippling the energies and initiatives of markets.

There are many good reform suggestions that can be classified as principle-based rules. Prudential regulations, designed to reduce the level of risk, all have this character. Principle-based rules retain operational flexibility. For example, a rise in capital adequacy, linked to the stage of the cycle (a sharp rise in credit is normally a good indicator) would have to be implemented by the domestic systemic regulator. Implementing micro-prudential standards in financial markets such as prompt corrective action linked to banking parameters is a task for a local sectoral regulator. Principle-based rules avoid regulatory intervention in operational decisions of firms.

The key weakness the crisis highlighted was systemic risks and procyclicality due to spillovers from individual decisions. Yet, in the United States Dodd-Frank Act systemic risk was largely relegated to councils of regulators that could create delays. Regulators in one country would not want to be stricter than in their competitor countries. Basel III emphasizes holding more capital to absorb future losses. Yet, these are difficult to build in bad times. Such buffers reduce lending and are therefore procyclical. As a result, they are likely to be further postponed.

Another key weakness of proposed regulations is the focus on banks together with many exemptions. This will encourage the proliferation of “shadow banks”, which are institutions that conduct some banking activities but are subject to much less regulations than commercial banks are subjected to. Shadow banks, such as investment banks, hedge funds and mutual funds are a major source of volatility in capital flows to emerging markets. They also contribute to commodity price shocks that adversely impact emerging markets.

Global coordination can compel financial firms to choose safe over risky strategies, by removing the moral hazard from bailouts, and assuring that the competitor is not adopting risky strategies. Competition can force an institution to follow strategies that are high risk but offer high returns. That is why external regulatory standards are so powerful. If a bank is assured its competitor will not take more risks in order to make more money, it will avoid such strategies. Universal application of basic standards prevents regulatory arbitrage.

The simplicity of transaction-level regulation, based on broad, macro patterns, makes it easy to adopt such regulations universally, thus closing exemptions and preventing competitive arbitrage. Examples are margins, position limits, taxes, loan-to-value ratios, and additional provisioning based on credit growth to specific sectors. Some of these have been successfully applied in many EMs, including India.

These types of regulation have the potential to close the gaps in international regulatory reform. They create good incentives, are automatically counter-cyclical, and can be made immune to regulatory discretion and micromanagement, thus protecting useful financial innovation. A package using these types of regulation could safely allow some fall in capital buffers, thus helping maintain lending. Such regulatory improvement and harmonization across countries would allow faster liberalization in EMs.

Macro-prudential regulation and micro-prudential regulation require different skills and information. The best alignment of information and incentives occurs if CBs are responsible for macro-prudential regulation, sectoral regulators for micro-prudential regulation, and there is good coordination between the two. Formal oversight authority over banks and markets generates information for CBs. This is useful for monetary policy, and policy analysis is useful for macro-prudential tasks. For example, FX and interest rate derivatives markets affect macro-variables. CBs have become crucial for the financial sector in their role as lenders of the last resort. The crisis forced them to expand this function beyond banks, as the financial sector diversified, its interlinkages thickened, and ability to inflate balance sheets procyclically and create risk increased. More responsibility for the systemic risk regulator must come with more power to check such credit inflation.

Micro-prudential supervisors also have an essential role since they have detailed knowledge of financial markets and institutions and will have critical information to assess stability risks. The macro/micro regulatory split has a functional basis. An apex body must not be a financial market regulator like the Financial Services Authority (FSA) in the United Kingdom, which would tend to support financial sector competitiveness and profitability, but a body for coordinating and sharing information led by the systemic risk regulator. The FSA has now been wound-up as an experiment that failed, with responsibility for banks reverting to the Bank of England.

Indian regulatory structure

The post-1990s reform shift from microintervention to a strategy of macromanagement meant a shift to regulations based on broad macroeconomic patterns. For banks it meant strengthening prudential (safety) norms and the supervisory framework. The Basel I Accord capital standards were implemented fully by March 1996. Guidelines on income recognition, asset classification, provisioning, and capital adequacy were tightened. Therefore, regulators used a combination of restrictions, supervision, and incentives with a wary eye on market failure. Although controls were reduced and steady market development encouraged, restrictions continued for complex financial products. One of the parties entering into an OTC contract had to be regulated by RBI. Guidelines on securitization imposed conservative capital adequacy requirements on exposures. Innovation in products and markets was slow.

The experience of scams in the securities market, involving a non-bank financial company (NBFC), a cooperative bank, and a commercial bank, after the 1990s reform led to a strengthening and extension of supervision and prudential norms to cover NBFCs. Given large capital flows there was a regulatory focus on systematically important non-deposit taking NBFCs and financial conglomerates. Thus, the scams pushed the regulators towards universal regulation, and towards closing the regulatory loopholes that created mature financial markets. Cross border flows across several regulatory jurisdictions led to initiatives for regulatory coordination across borders.

Nonetheless, most prescient were the macro-prudential regulations implemented much before their worldwide post-crises adoption. Countercyclical provisioning and differentiated risk weights for bank lending to bubble-prone sectors, such as real estate and equity markets, were examples of such regulation. They created incentives to moderate risky behaviour. A system of Prompt Corrective Action for banks based on capital adequacy, non-performing assets, and return on assets parameters gives an example of principle-based rules. All these reduced pro-cyclical incentives. There was an emphasis on stress tests to compensate for weakness in risk models.

This conservative yet forward looking regulation meant Indian banks were in sufficiently good health to make the cost of Basel III compliance low. Banks tier I capital to risk weighted assets was already 9.3 per cent in 2010 compared to the 8 per cent required.[13] Its history of macroprudential regulation and attention to the shadow or non-banking sector implies India's regulatory structure has a chance of being immune to the major flaws in the evolving global regulatory structure if it continues past practices. Some issues for India in accepting Basel III norms are: (a) very low credit to GDP ratio must be allowed to rise structurally, and (b) the large risk free statutory liquidity banks hold is not accepted as a liquidity buffer since it is compulsory. There is concern that the cost of OTC derivatives will rise, but electronic platforms like the Clearing Corporation of India are available to meet reporting requirements at reduced cost.

[13] Gross non-performing assets (NPAs) as a percentage of loans had fallen from 12.8 in 2000 to 2.4 in 2010. They rose slightly in 2011, but the overall structural improvement dominated.

India had a precursor to the systemic council the US Dodd-Frank Act prescribed, as part of post GFC regulatory reform. A High Level Coordination Committee for Financial Markets (HLCCFM) was formed in 1992 in response to scams and regulatory arbitrage to monitor systematically important institutions with informal coordination across regulators, with the RBI governor as Chair. In 2010 a Financial Stability and Development Council (FSDC), with the Finance Minister as Chair, and RBI governor as Chair of the stability sub-committee replaced the HLCCFM. The structure was a diluted implementation of a series of committee reports that sought to shift power away from the RBI to favour market development (see, for example, Rajan, 2009). However, these reports were all influenced by the pre-crisis free market regulatory philosophy. Worldwide CBs were given more responsibility for financial stability after the GFC. India was unique in reducing the role of the CB, despite the current regulatory structure having done well in the crisis. Giving more responsibility to politicians goes against these worldwide trends. It also ignores lessons from India's history, where political control of the financial sector led to financial repression, which helped fund government expenditures. It is better to establish independent, professional regulatory institutions with good interaction and good peer review. The RBI's broader regulatory responsibilities provided information and contributed to designing preventive macro-prudential measures. There was synergy between monetary policy and regulatory responsibilities over many market instruments.

The Indian regulatory structure, however, is overweight on stability. Development is slow. Since coordination is poor among government agencies, the FSDC should function as a strengthened HLCCFM to improve coordination. The latter was set up in a crisis, without a well thought out structure and function. Better norms of functioning can be devised. Legislation can mandate the objectives of both systemic stability and market development.[14] It can plug regulatory gaps and assign responsibility with clear time lines to fulfil the objectives.

Better coordination is essential to deliver both stability and development. Modern financial products do not respect regulatory boundaries. For example, currency options in 2010 involved two regulators. Participating members must be registered with SEBI and follow its guidelines for position limits, margins, surveillance and disclosures. Yet, RBI retained the power to modify eligibility, limits, and margins and take any other actions required for stability and orderly development of FX markets.

[14] EPWRF (2009) suggested creating a Financial Market Development Agency reporting to the Government as in New Zealand. A financial sector legislative reforms commission, set up in 2010, aims to modernize and harmonize Indian financial laws for a more interdependent market structure.

Sectoral regulation is best organized on a functional basis, but inevitable overlaps require a more complex definition of functions. Overlap may even create more regulatory ownership. A narrow regulatory jurisdiction can lead to neglect of the big picture. With its stability concerns addressed, RBI would favour deep liquid markets that could improve the transmission of monetary policy. Overlaps have been blamed for many delays but it is unclear allocation of responsibility that creates problems such as passing responsibility to the other, gaps in covering systemic risks, or high costs for industry in fuzzy dealings with many regulators.

Regulators will coordinate better if each regulator is vulnerable to the other. For example, while trading is the primary responsibility of SEBI, where it impinges on monetary policy or systemic risk RBI must continue to be involved, but with a mandate for market development. A clear allocation of responsibility, even with interlocking regulation, could resolve delays such as in establishing corporate repos. The government has since clarified that SEBI will be responsible for the primary and secondary markets in corporate bonds and RBI for corporate repos. With the systemic risk regulator coordinating the FSDC with a clear mandate for development, markets can be given more freedom to design products. The Finance Minister should come in only as a last and rare resort.

VII. CONCLUDING REMARKS

In an emerging market it is natural to regard mature markets as an ideal, so that domestic systems are seen as lacking. However, the global financial crisis beginning in 2007 exposed flaws in the finance dominated markets and the financial regulations that existed in the West. Countries such as China and India that followed non-standard paths have done the best. Therefore, it is worthwhile to study those paths to see what worked. The definition of a mature financial system may have to be modified to some extent. The real sector must have priority since finance is a good tool but a bad master.

Nonetheless, even taking the goal of a mature financial system as given, it is not correct to ignore the path that leads to that goal and insist that the goal be reached instantly. The path may have to be long, with domestic institutions and markets to be strengthened before full capital account liberalization. Regulation that creates the correct incentives must be part of domestic market liberalization. Future liberalization should embrace what has worked in the past and be structured in a way that maximizes the probability that the region's critical developmental needs, such as inclusion and infrastructure, will be met. Improved domestic markets will benefit foreign participants as well. Japan's lost decade showed that recovery from financial sector problems is difficult. As was the case in Japan, excessive financialization is imposing a large cost on Europe and the United States.

That India and China, with some controls, had the highest growth rates in the world, suggests that some controls can be useful. The experience of India's neighbours also demonstrates that a middling through path does best. Pakistan with a more open capital account suffered balance of payments crises and frequently had to turn to IMF for aid; Bangladesh retained more controls and needed IMF help only once. These two similar-sized countries had opposite experiences. India continued with strategic controls and had more successful domestic institutional and market deepening. In the post-reform period, India did not need IMF and was able to build up substantial reserves. India's experience suggests that moderate and sequenced external and domestic liberalization is the safe way to proceed.

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