

# THE FUTURE OF FINANCIAL LIBERALIZATION IN SOUTH ASIA

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## FOREWORD

The Development Papers series of the ESCAP Subregional Office for South and South-West Asia (SRO-SSWA) has been launched to promote and disseminate policy-relevant research on the development challenges facing South and South-West Asia. It will feature policy research conducted at the SRO-SSWA as well as by outside experts from within the region and beyond. The objective is to foster an informed debate on development policy challenges facing the subregion and sharing of development experiences and best practices.

This paper by Professor Ashima Goyal looks at the South Asian experience in opening up domestic financial markets, and strengthening domestic financial institutions. It provides cautionary tales in light of the global financial crisis, which has exposed flaws in the finance dominated markets and regulation of the West. She highlights how India and China, with some controls, have some of the best growth rates in the world. Furthermore, contrasting experiences are available from Pakistan and Bangladesh, two similar sized economies of South Asia. Pakistan with a more open capital account has suffered balance of payments crises and had to turn to the IMF for aid often; Bangladesh that retained more controls needed such help only once. India also continued with strategic controls and had more successful domestic institutional and market deepening. It was able to build up substantial reserves and did not need IMF's support at all in the post-reform period.

In the light of her analysis, Professor Goyal feels that a moderate and sequenced external and domestic liberalization is the way forward while keeping in mind the needs of financial inclusion, infrastructure finance and further domestic market deepening. The real sector must have priority since finance is a good tool but a bad master.

We hope that Professor Goyal's paper will contribute to the ongoing debate on financial market liberalizations in the subregion.

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**THE FUTURE OF FINANCIAL LIBERALIZATION IN SOUTH ASIA****Ashima Goyal<sup>‡\*</sup>****Abstract**

The paper defines financial liberalization, distinguishing between capital account convertibility and liberalization of domestic financial markets. It then examines the stages and the strategy of Indian financial reform and compares it with that of other South Asian countries. The Indian strategy followed a well thought out sequence whereby full capital account liberalization was to come after deepening domestic markets, and improving government finances. One alone is dangerous without the others. The experience of the global crisis has validated the Indian strategy and also shown that foreign entry has benefits but cannot resolve all issues. Deepening domestic markets and better domestic and international regulation is a necessary prerequisite for full convertibility. The stages of future liberalization should be adapted to the needs of financial inclusion, infrastructure finance, and domestic market deepening.

JEL Code(s): F36, G18

Key words: liberalization, capital account convertibility, regulation, inclusion, markets.

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## **THE FUTURE OF FINANCIAL LIBERALIZATION IN SOUTH ASIA**

### **I. INTRODUCTION**

Broadly, liberalization means a greater role and more freedoms for markets but there are at least three components of financial liberalization. It can refer to freeing domestic markets and institutions from controls and developing them; it can refer to allowing foreign entry into the domestic markets for financial assets; and it can refer to the loosening of government regulation of the financial markets.

Pre-reform South Asia had severe financial repression. Financial markets had little freedom, most interest rates were administered, and the aim of a plethora of controls was to make funds available for different Government programs. The government fixed the exchange rates. There was scarcity and rationing of foreign exchange. Neither the current nor the capital account of the balance of payment was convertible.

Reforms have freed markets and developed underlying institutions, but there has been a gradual process with graded restrictions on foreign entry. Wide variations exist across South Asian countries. In general, more openness created more volatility, but on the whole was beneficial. Lessons can also be drawn from the development of the financial sector in other parts of Asia, such as in South-East Asia. The sectors and countries with the maximum foreign entry, however, were not the most successful. The experience suggests deepening domestic markets and better domestic and international regulation is a prerequisite for full convertibility. Therefore the pursuit of domestic development priorities should define the future path of financial reform through the strategic removal of controls, in step with continuous development of domestic markets. The paper, therefore, explores the specifics of this path and the implications of ongoing rethinking of regulation after the global financial crisis for the structure of domestic regulation. The Euro debt crisis is likely to prolong uncertainty in global markets, so again deepening domestic markets should have priority over more financial liberalization.

This paper evaluates South Asian financial reforms on three criteria: domestic financial market and institutional development, the opening out to external financial markets and participants, and the type and degree of government regulation. It shows that countries with a balanced combination of financial reforms in all three areas avoided domestic crises, and survived even the global financial crisis with minimal impact. This paper outlines a policy

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strategy of “muddling through” based on a sequence whereby full capital account liberalization comes after deepening domestic markets, and better government finances. Finally, it draws out the implication of this perspective for further reform in different financial sectors, and in the structure of regulation.

The remainder of this paper is structured as follows. After a discussion of financial liberalization in Section 2, Section 3 discusses its consequences for the balance of payments and for navigating global crises in South Asia and some broader Asian experiences and section 4 links the path of future liberalization to critical development imperatives and gives implications for development of the domestic financial sector. Section 5 brings out the implications for the structure and reform of regulation, before Section 6 concludes.

## **II. LIBERALIZING REFORM**

The post-reform period began around the early nineties in South Asian countries and saw considerable institutional and market development<sup>1</sup>. Easier entry saw many private and foreign banks and mutual funds entering the marketplace. Restructuring, computerization and competition improved banking services and banking parameters, such as non-performing assets. There was a rise in the share of retail credit. More interest rates became market determined. The remainder of this section characterizes the specific nature of domestic, external and regulatory financial reforms in India, Pakistan and Bangladesh.

### **India**

#### **Domestic**

In India, at the time of writing, only interest rates on government small savings and providence schemes remain administered. Effective use of new technology effectively created electronic markets reaching and sometimes exceeding international benchmarks in disclosure norms, trading volume, settlement cycle, and low transaction costs. In the order driven screen-based trading system, each investor can access the same market and order book, at the same price and cost, irrespective of location. Dematerialization of securities reduced bad paper risk. Exchanges were corporatized and demutualized. A number of commodity exchanges have emerged. Settlement is now through clearing corporations. Derivatives were gradually introduced and now have achieved high trading volumes. Strict

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<sup>1</sup> Reforms began at different dates. In Pakistan reforms were started in end 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).

norms regarding disclosure of price sensitive information and conflicts of interest, contributes to reducing asymmetries of information in price discovery. Changes in technology have expanded regulatory possibilities, and made innovation safer. Markets are able to handle large global volatility without problems.

There were rapid developments also in foreign exchange (FX) and money markets after 2000. A central counterparty, CCIL (Clearing Corporation of India) was set up to undertake guaranteed settlement for government securities (G-Secs), repos in G-Secs and FX market trades, following international best practices. Infrastructure was created for electronic payments and real time gross settlement (RTGS), and steps taken to encourage migration from paper money.

### **External**

After an initial double devaluation of the Indian exchange rate in June 1991, the Indian rupee moved to a managed float. The degree of flexibility and market determination increased with the deepening of FX markets. The nineties saw steady depreciation, which covered India's relatively higher inflation so there was no large deviation of the real effective exchange rate (REER) established after the initial devaluation. The Reserve Bank of India (RBI) intervened to prevent excess volatility, accumulating or releasing foreign exchange largely through public sector banks. Two-way movement of the nominal rate began from 2003 as the dollar depreciated. The swings became wide after the global financial crisis due to substantial movement of portfolio capital.

The reforms established current account convertibility in the nineties. The foreign exchange regulation act (FERA) was changed to foreign exchange management (FEMA). But convertibility of the capital account was more gradual. Liberalization distinguished between types and direction of flows and was much greater for equity compared to debt flows including bank loans, and for foreign compared to domestic residents. FX requirements for the latter's transactions were liberalized before their outflows for investment. Among debt inflows long-term debt was to be liberalized before short-term. The rationale was equity, in contrast to debt, shares in and therefore reduces liabilities in a crisis<sup>2</sup>. Selective deregulation

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<sup>2</sup> Capital flows can 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 an FII could invest up to 10 percent of the total issued capital of an Indian company, the cap on aggregate debt flows from all FIIs together was 1.55 billion USD. Source: <http://investor.sebi.gov.in/faq/foreign%20institutional%20investor.html>

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aimed to develop markets. Foreign participation provided competition and learning but was to be restricted until they reached sufficient maturity to be able to handle more volatility.

### **Regulation**

The Reserve Bank of India (RBI) continued as the regulator of banks. New financial regulatory institutions set up were the capital market regulator: Securities and Exchange Board of India (SEBI); the insurance regulator: Insurance Regulatory and Development Authority (IRDA); the commodity futures trading regulator: Forward Market Commission (FMC); and the interim pension regulator: Pension Fund Regulatory and Development Authority (PFRDA). A 2006 amendment to the RBI Act expanded its regulatory powers beyond banks to cover the financial system as a whole and to give directions to all agencies active in markets. However, procedural aspects of trade remained with SEBI.

In general controls gave way to market based regulation. A rule-based system largely relying on self-certification replaced cumbersome administrative procedure that required multiple discretionary approvals. Along with traditional oversight, advanced risk management systems promoted transparency, efficiency, safety, and market integrity. Practices included online monitoring and surveillance, limits on positions, margin requirements, and circuit filters.

## **Pakistan and Bangladesh**

### **Domestic**

Reform freed the domestic financial sector from controls. In Pakistan, the statutory liquidity ratio (SLR) has been brought down to around 20 percent of total demand and time liabilities from its highest pre-reform value of 45 percent. 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 uses indirect tools such as open market operations, discount rates etc. Domestic interest rates on lending dropped to 5 percent from 20 percent. The creation of the Securities and Exchange Commission of Pakistan (SECP) aimed at establishing a professional agency that would improve the regulation and supervision of the securities market

In Bangladesh, although the financial sector has strengthened, government interventions in the form of ceilings, moral suasion, and directed credit still exist. Accounting and reporting are non-transparent. Banks are free to fix rates of interest on their deposits of different types

since the withdrawal of restrictions on the floor rate of interest in 1997. Banks are also free to fix their rates of interest on lending except for the export sector, which was fixed at 7 percent per annum from January 10, 2004. The SLR changed in the past decade but was on an average around 20 percent.

In South Asia, as in Asia more generally (see Table 1, Section III), the debt market remains underdeveloped. Yield curves exist but thin markets make benchmark rates unsatisfactory.

### **External**

Both Bangladesh and Pakistan declared full current account convertibility in 1994, a few years after India did. While convertibility remained partial on the capital account for both, Bangladesh retained more controls compared to Pakistan.

In Pakistan, as reforms progressed, foreign banks were allowed to bring in and take capital out, remit profits, dividends and fees without any prior approval. The corporate sector could 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 percent 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, reforms included privatization of and free foreign investment in state owned enterprises except for a few specified industries. Foreign investors were given permission to retain 100 percent 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.

In contrast, in Bangladesh, resident owned capital is not freely transferable abroad. Prior Bangladesh Bank (BB) approval required is given only sparingly. Even current settlements, beyond certain indicative limits, are subject to bonafides checks. Direct and portfolio investments of non-residents, capital gains and profits/dividends are repatriable abroad.

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

exchange rate regime since 31 May 2003. Under the regime, BB does not interfere in the determination of exchange rate, but operates monetary policy to minimize extreme swings in the exchange rate that could have adverse repercussions. In the forex market, banks are free to buy and sale foreign currency in the spot and also in the forward markets.

Liberalization paths were similar in South Asia. But Pakistan had the most open capital account, while in Bangladesh continuing controls restrained financial deepening.

### III. CONSEQUENCES OF FINANCIAL LIBERALIZATION

Trend output growth rose in the post reform period, but so did volatility. Since opening out was in the early nineties, the countries were exposed to a series of major international financial crises. But conservative regulation and the gradual approach meant domestic financial sectors did not undergo a crisis. Greater mobility of various types of capital flows was a key consequence of liberalization.

#### India

A distinction was made between different types of Private Foreign Investments<sup>3</sup> (FIs).

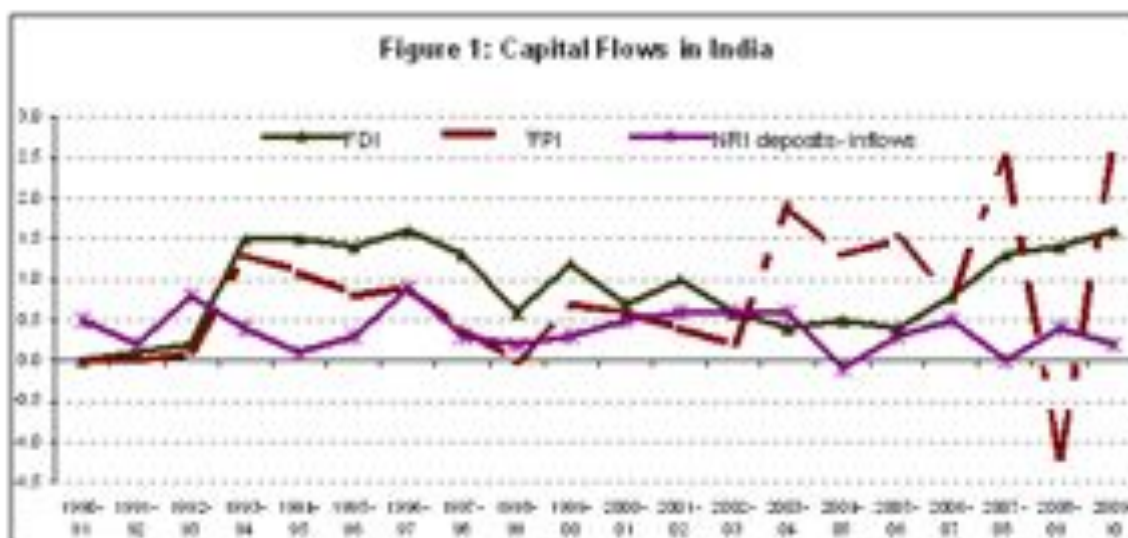
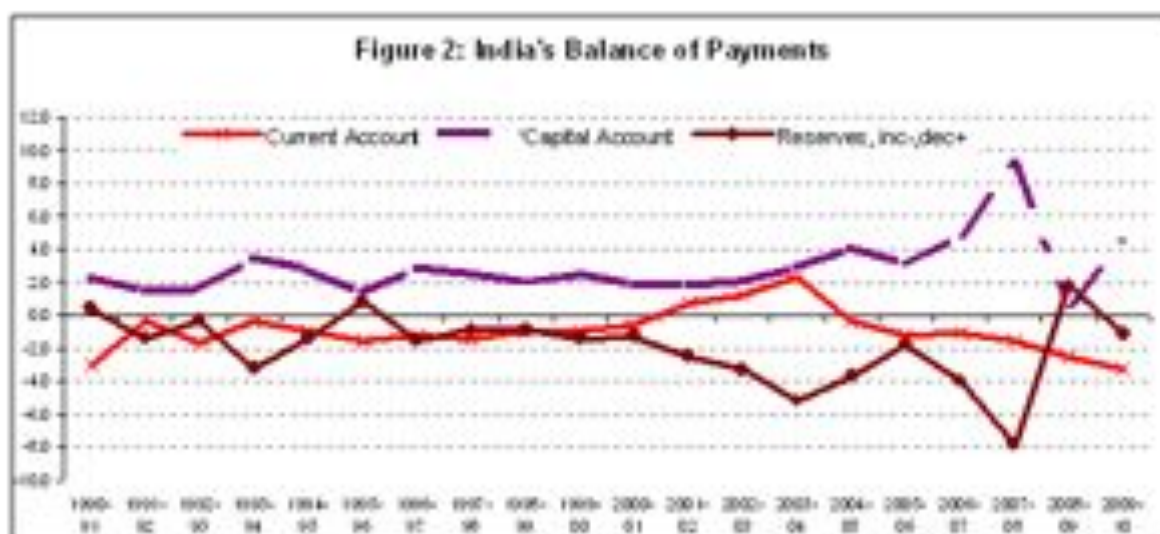


Figure 1 shows some categories of inflows as a percentage of GDP. There was steady acceleration in FDI, which is an equity-type flow since it shares risks, and higher levels continued despite the global crisis. The Figure also shows how the absorptive capacity of the economy increased. USD 3b in the beginning of reform came to about 1.5 percent of GDP

<sup>3</sup> These include Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI) and other long- and short-term investment flows. The analysis builds upon earlier work, in particular Goyal 2010a. All references are not given to save space but are available at [www.igidr.ac.in/faculty/ashima/](http://www.igidr.ac.in/faculty/ashima/). Figures quoted, unless otherwise mentioned, are from IMF, RBI, Ministry of Finance (GOI), SBP and BB websites.

and \$29b in 2007-08 came to a similar ratio as GDP had risen. Gross inflows were even higher, since Indian firms began investing abroad. FPI shows fluctuations, turning briefly negative both during the East Asian and global financial crisis. Non Resident Indian (NRI) flows respond to opportunities for interest rate arbitrage, but NRI deposit rates were capped in the later years. So NRI inflows were quite low when other types of inflows were booming. The caps were strategically removed when India needed more capital inflows than were coming in during the Euro-debt crisis in 2011.

Figure 2 shows reserve accumulation was the mirror image of the capital account. It was volatile capital flows that were absorbed as reserves<sup>4</sup>, while the current account deficit (CAD) was about 1-2 percent of GDP. Reserves provided self-insurance, and damped volatility of the exchange rate, but had a cost. Given India's higher interest rates, sterilization of reserve accumulation, to maintain targeted rates of money supply growth, imposed large interest costs borne by the Government, Reserve Bank of India (RBI), and other banks. Sterilization meant swapping Indian Government bonds for foreign treasuries in the RBI's balance sheet, when the interest on Indian bonds was higher.



Global Depository Receipts (GDRs) allowed firms to raise equity abroad and 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 borrowing in response to domestic

<sup>4</sup> India's foreign currency reserves peaked at \$ 315.66 billion in June 2008 and had fallen to 262 billion in end March 2009, when they exceeded India's foreign debt by just \$ 22 billion. Although outflows were only \$20 billion, much of the fall was due to valuation effects.

distortions, even while selective relaxation for longer-term debt increased credit availability for large corporates and for infrastructure funding.

Partial capital convertibility gave flexibility along the line of control—fine-tuning was possible in response to circumstances. Additional instruments were available to tackle the policy trilemma, giving some monetary autonomy even under volatile capital inflows. For example, stricter end use criteria were imposed for firms bringing funds in during periods of excessive inflows, or banks net open position limits were reduced when many banks took long positions on the dollar in 2011. Inflows have to be allowed to go out if they are to come in, but continuing restrictions on domestic capital outflows reduce the reserve cover required. But, as reserves accumulated, selective easing of outflows by domestic residents and further trade liberalization were used as another way of absorbing inflows.

The CAD is also the excess of domestic savings over investment. A small CAD implied the contribution of foreign savings to financing the resource gap remained small, although they contributed to relieving sectoral financing constraints. 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 would support the domestic investment environment. More appreciation would increase net imports and the CAD. But persistent current account deficits imply there are limits to appreciation. The currency can depreciate if the Central Bank does not smooth demand and supply if inflows reduce. Temporary capital inflows do not always reflect fundamentals, and so the markets determined rate can deviate from the equilibrium exchange rate.

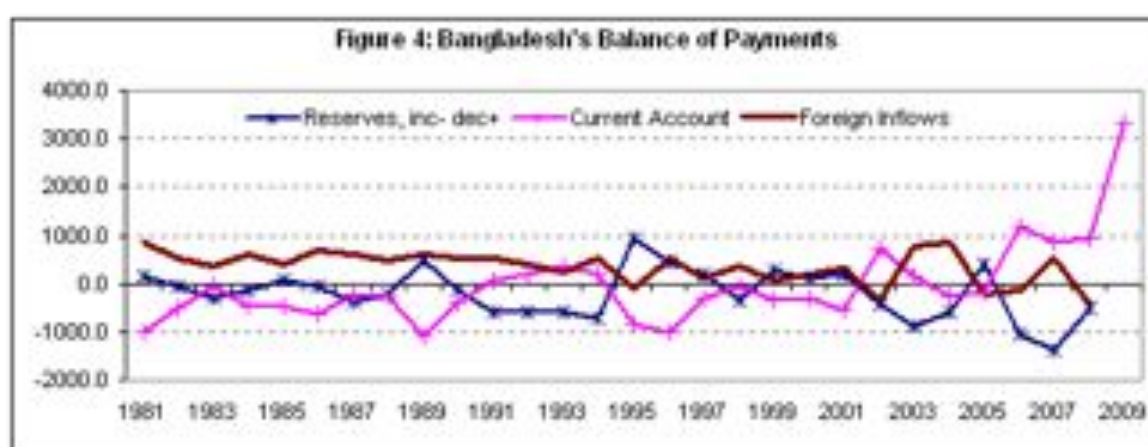
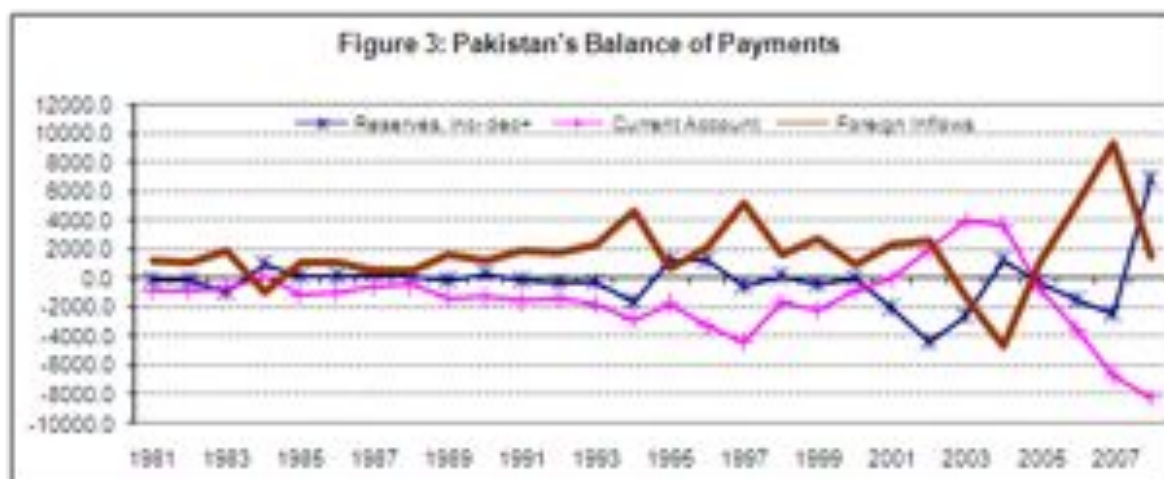
### **Pakistan and Bangladesh**

In these countries (Figure 3 and 4, in USD billions) the change in reserves is not the mirror image of capital inflows<sup>5</sup>. 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. Bangladesh saw a sharp improvement in its current account after 2005, while for Pakistan it was the reverse.

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<sup>5</sup> Due to lack of data on capital flows they are derived as change in reserves plus current account deficit for Pakistan and Bangladesh.





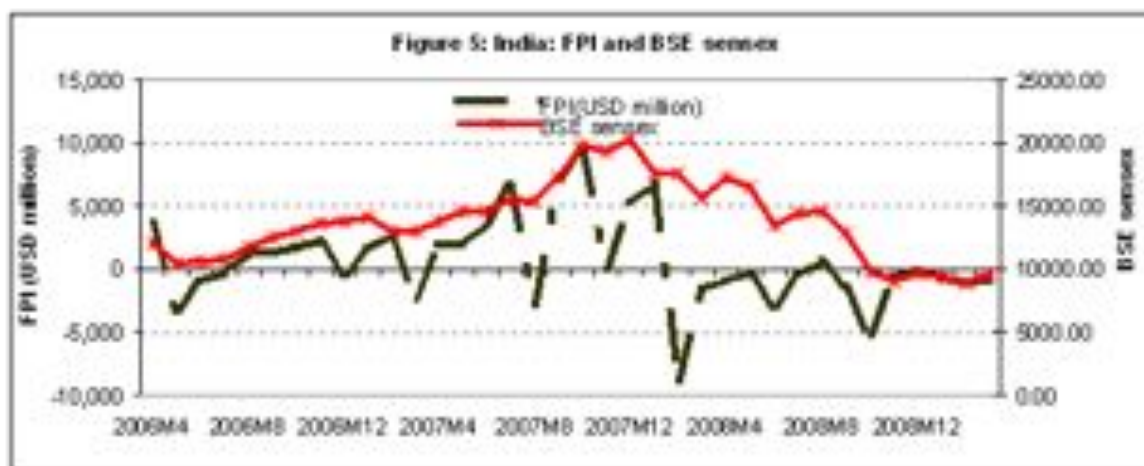
### Asia

Asian financial liberalization preceded that in South Asia. Many of the smaller more trade dependent Asian countries, except Malaysia, had more or less open capital accounts by the 1990s. Debt and equity type inflows were both liberalized. Since government debt and deficits were generally low, it was firms and banks that borrowed abroad. 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 overborrow. Hype about the Asian Miracle contributed to overlending. For example, prior to the East Asian crisis, Thailand had a CAD of 8 percent and a real estate bubble. High short-term debt aggravated outflows and bankruptcies during the crisis. However, these countries had gained so much from globalization they remained committed to it, and to undertaking whatever financial reforms were required to reach international standards. Foreign participation and entry contributed towards reaching those standards. This resolve remains unshaken after the GFC (Lee and Park, 2010).

China as the major exception retained many types of capital controls. It also differed from India in restricting FPI and liberalizing FDI relatively more.

### **Withstanding crises**

Navigating the many international crises of the post-nineties offered a test of country strategies. Foreign inflows do make more resources available, demonstrate better organization and technology, aid price discovery, stimulate local investment, and allow better allocation of world savings. But inflows to emerging markets (EMs) are subject to sudden stops or reversals due to infectious panics that could be unrelated to domestic fundamentals (Calvo et. al. 2004). The global financial crisis demonstrated this in 2008 and the European debt crisis in 2011, when capital flowed out of EMs due to external conditions.



Indian FDI was relatively stable (Figure 1), suggesting it is worth reducing hurdles to entry. Although FPI was volatile 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 BSE stock index rose from 8000 to 20,000 and FPI inflows were \$ 47 billion. But over the next year, as stock markets fell back to 8000, outflows were only \$15 billion.

FPI inflows benefited firms, despite higher volatility, since loans became easier to get as more venture capital entered. The ratio of gross investment to GDP rose from 25.2 to 39.1 in the high growth period of 2003-08. FPI also tended to resume soon once stock indices had corrected.

But households did not benefit. Retail participation shrank. The share of household financial savings in shares and debentures post-reform was low at 5.1 percent in 2005-06 compared to 23.3 percent pre-reform in 1991-92. For the fiscal year 2007-08, it had increased to 12.5

percent; but following the Lehman bankruptcy in September 2008 it collapsed again to 2.6 percent. But 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 it focused on high-end customers, and on firms. Local pension funds had not grown adequately, and their exposure to stock markets was capped. The banked population itself remained low, so exposure to stock markets had to be even lower. Despite entry of new private banks 60 percent 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. Understanding currency risk and lowering the interest differential is a precondition for more wholesale liberalization of external borrowing.

Thus foreign entry is not a panacea. Foreign entry helps but it alone cannot deepen markets. Other conditions also have to be in place. Eventual internationalization of Indian financial services is required as Indian companies go global. But the sequencing has to be correct. 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 needed help from the IMF 7 times<sup>6</sup>. In contrast Bangladesh had only one arrangement with the IMF in 2003. India, which also retained capital controls, and had more capital market deepening compared to Bangladesh,<sup>7</sup> did not have to go to the IMF at all after the early nineties. So while strategic controls are protective, so is domestic market deepening. While India does have a larger market size, the two countries, of similar size, did have highly divergent experiences.

There is a perspective that regards any departure from full liberalization as a failure of reforms. But experience shows a carefully sequenced path predicated on domestic reforms is a better strategy of liberalization. Distinction between types of flows is useful and must be

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<sup>6</sup> There were two arrangements with the IMF in 1997 one in each of 1993, 1995, 2000, 2001, and 2008.

<sup>7</sup> 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 satisfactorily, desired outcome were not achieved.

retained. In South Korea the security of reserves led to high short-term debt. So the latter has to be discouraged regardless of other buffers. Free foreign entry without the other harder preconditions would put a country at unnecessary risk.

**Table 1: A comparative picture of financial systems (% of GDP)**

	Financial Sector Assets							
	Deposit-taking Financial Institutions		Nonbank 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*
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
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@			27.5*
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
<b>Asia Average</b>	<b>181.1</b>	<b>197.8</b>	<b>28</b>	<b>46.1</b>	<b>63.5</b>	<b>121.2</b>	<b>39.3</b>	<b>66.2</b>
Eurozone	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
U.S.	79.6	107.9	279.3	314.1	152.1	105.8	138	175.8

Notes: \* Government Bonds outstanding on 2005; @ 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.

Source: ADB (2010 and 2009), and except for \* source for Pakistan is:

<http://www.sbp.org.pk/bsd/10YearStrategyPaper.pdf>;

<http://www.osec.ch/sites/default/files/PakistanBankingSector2011.pdf>;

<http://www.sbp.org.pk/reports/annual/arFY03/Capital%20Market.pdf>; for Bangladesh

<http://www.imf.org/external/pubs/ft/scr/2010/cr1038.pdf>

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 low developed country interest rates since the federal fund rate peaked at 5.25 percent in 2007. Rather high leverage, given regulatory capture by investment banks, enhanced flows in response to profit opportunities. When Lehman Brothers failed its leverage was 30:1 compared to 15:1 for a commercial bank.

During the exit in 2010 the West and EMs were in different phases of their macroeconomic cycle. Higher growth in EMs and the near zero interest rates in developed markets 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 EMs. They did not last, however, in periods of heightened global risk, such as the European Debt crisis in 2011 FPI would rush back to the US.

Table 1 shows the outcomes across different financial sectors and Asian countries compared to advanced country benchmarks. A number of facts stand out. First, the dominance of deposit taking institutions in Asia compared to the West. Second, Asia lags much more in bond markets than it does in stock markets. Third, Indian stock markets have developed more than either its banks or its bond markets. Both the latter need more attention. 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 this, the deposit ratio is still too low. Lee and Park (2010) point out, however, that after the global financial crisis (GFC) as higher capital adequacy requirements restrict credit from banks markets may have to be developed further in developed Asia.

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

A well-functioning Asian bond market (ABM) 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; recycling the region's large savings for regional long-term investment, thus reducing maturity and currency mismatches, and global imbalances, as dependence on US capital markets would fall. Stable Asian savings would become available to finance large Asian infrastructure needs.

Initiatives taken to further these aims include establishment of the Asian Bond Fund (ABF), and the Asian Bond Market Initiative (ABMI). The ABF, a fund comprising of the foreign exchange reserves of regional member CBs, has the aim of investing in regional bonds to contribute to the development of regional bond markets, and reduce dependence on dollar denominated assets. ASEAN + 3 is also seeking to strengthen regional markets through the

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ABMI, and building a common market structure: securitization, a credit guarantee, credit rating and settlement system essential for developing regional market interaction.

The 1990s crisis also 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. But reform of the International Financial System (IFS), was not carried out (Goyal 2010a). So Asia was pushed to adopt self-insurance and cooperation measures that improved its bargaining position and helped it survive the global crisis. The GFC 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, although there are beginnings, which need to be pursued vigorously.

Liberalizing, deepening markets and improving institutions and policy form a package. One alone is dangerous without the others. Research and empirical estimation has found that only countries with strong domestic institutions, markets and government finances benefit fully 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 crisis showed that stronger international financial architecture and regulation are also preconditions for full capital account liberalization. Countries with more controls were found to have a lower probability of crisis (Ostroy et. al. 2010).

### **Policy**

Until such improvements occur, controls and prudential requirements serve as an essential line of defense against excessive volatility of capital flows. They can be designed to be market friendly<sup>8</sup>. Pure controls involve restrictions on cross border flows by residence. Market based controls include un-remunerated reserve requirements and taxes. For short-term debt pure controls may have to continue, but for portfolio flows market based controls such as taxes may be considered.

It is often argued that capital flows should not be subject to taxes as it would increase costs for the country that imposes them. But just as prudential regulations are considered necessary for market stability, if cross border taxes contribute to crisis proofing they lower costs over the longer-run. Costs are also minimal if it is part of a global agreement. A low universal tax

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<sup>8</sup> India has become a member of the financial action task force (FATF) against global terrorism and money laundering. Detailed electronic trails, linked information, and KYC norms make it possible to discriminate between origins and types of flows together with central registration that reduces transaction costs.

is easy to standardize and would reduce excessive short-term transactions, while encouraging more stable longer-term flows.

Transparent sequenced capital account convertibility should follow domestic financial deepening, and rise in absorptive capacity with the real sector as priority. Improvements in international financial regulation or regional arrangements would allow faster 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 the Indian case can be generalized for the region. Critical development needs in terms of financial development in the region are inclusion, infrastructure financing, and more effective risk management in the derivatives markets.

##### **Inclusion**

Although inclusion is a major aim, the reforms have not been so successful in this. The idea of financial inclusion has to expand beyond just availability of credit to expansion of 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: that is, to evolve a low denomination strategy that meets the average consumer’s needs. Then it is possible to tap the 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 built up, and positive incentives offered. Possible measures include:

- Education of investors, increasing financial literacy
- Making one point disinterested information and suitable services available
- Designing the ecosystem and service package to meet lifestyle needs
- Reducing transaction costs in using technology for ease of entry, exit
- Registering and rating of agents
- Promoting simple transparent low cost instruments—index funds, ETFs

### **Infrastructure financing**

Poor Indian infrastructure is both a bottleneck and an opportunity. Spending on infrastructure is currently 6 percent of GDP, and is expected to reach 9-12 percent to finance one trillion US\$ over the 12th 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 such foreign investors in long-term rupee denominated bonds could contribute. Limits are necessary since structures can be created to index local currency denominated bonds to or make them payable in foreign currency thus creating currency risk.

Currently the maximum tenor of financing available is 15-20 years, and that also in limited quantities. New instruments such as take out financing are beginning to be used to rollover short-term financing, and allow exit of risk capital. After a project begins earning, other more risk-averse types of capital are willing to participate. Such instruments can enable its entry. Experience has been gained in PPP 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 can't sell insurance to those who need it in imperfect markets, they may underinsure reversals of capital inflow. A well-functioning bond market, for example, also allows firms needing external resources to share their revenues with those with access to foreign funds (Caballero and Krishnamurthy, 2004). A mix of equity and debt financing provides better incentives for firms—they have to ensure repayment for the latter.

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 they lost money.

Although one leg of every OTC trade is regulated in India, so 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. The



crisis has demonstrated the robustness of exchanges compared to other financial institutions. Worldwide no exchange failed since they have multiple risk management systems, and special systems to cover tail risks. Post crisis, worldwide, there is a move to report more derivative trade on exchanges. But currently day trading dominates in many instruments partly since physical delivery is limited. Measures are required to increase contrarian positions, open positions and hedging.

There are specific challenges in each financial sector to achieve the critical development imperatives and domestic financial deepening.

### **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 corporates and HNIs. For example, when average loan rates for blue chips were 5-7% they were higher at 9-11.25% for micro and small enterprises (MSEs). As established firms began raising credit abroad at cheaper rates, banks turned to retail credit, consumer durable and housing finance expanded. Legislation to aid loan recovery, and fledgling credit bureaus, which made credit histories available, contributed to the expansion of credit and reduction in non-performing assets (NPAs). Banks also participate in infrastructure finance, but do not have the scale and size to meet large financing needs. They soon run into sectoral exposure limits.

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 would 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) (the RBI's favoured mode of inclusion) would only be required for enrollment, cash deposit and cash withdrawal.

The RBI, however, wants to give banks the opportunity to leverage new technology and widespread agent network. In a smart card based technology, an agent is required for initiation of all transactions. Account details and the transaction data are stored on the smart card. But banks involvement in mobile financial services has advantages such as provision of

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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 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 non-banked population.

But after more than a year of the approval for mobile banking transaction volumes remained low in 2010. 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 are conflicts on the value creation by each party. But regulators have to increase competition between alternative service providers. If banks take too long, alternatives must be explored to ensure inclusion. Unbundling allows competition in one component. In 2008-09 RBI did do away with encryption for amounts less than Rupees 5000. It also lowered reporting requirements on the reasoning that small cards cannot be used for terrorist financing. Limits can be revised upwards to permit transactions like air-ticket purchase.

RBI also permitted non-bank entities to issue mobile-based prepaid payment instruments, based on representation from MSPs. But the response was poor. MSPs value added services have to improve. They are interested in the financial float, but RBI regards this as equivalent to deposit taking, which it is not willing to allow non-banks, since deposit insurance can't be given to non-banks.

Future directions could include finding innovative and non-exclusive ways to leverage new technology to spread banking services widely; building on large mobile user bases, and meeting the needs of specific population segments such as rural migrant labour; finding points of service that create utility for consumers, such as Kirana stores as business correspondents that also offer limited credit.

### **Markets**

Markets have seen considerable progress but new issues have come up over the reform years. The new stock exchange established, NSE, was meant to compete with the older, BSE, but it soon became dominant with 85 percent market share. In electronic markets physical distance does not matter, so the regional stock exchanges also died. 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. But with ICT geographically dispersed intermediaries can 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 no-profit 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 also demutualized but was unable to compete with NSE's more modern processes. Aware of the possibilities of tipping in networks, markets managements try to lock in customers in various ways. 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 the possibility of tying software.

America's security and exchange commission (SEC) has a "best-price" stock-handling rule to maintain competition across exchanges. But when 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 pro-active to maintain competition. This SEBI was not able to do. 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. But without regulation corporations will try to lock in customers and create entry barriers to increase profits. And without competition transaction charges will not come down for consumers. In 2011 the Competition Commission of India found NSE guilty of anti-competitive practices.

The Forward Market Commission that regulates commodity market exchanges has allowed a number of new exchanges to enter on the philosophy that competition will benefits users, but SEBI has not allowed even one. Regulators have to maintain a system that creates the best outcomes for users. With for profit corporations in a network industry competition is important, even while high standards are enforced on exchanges as self-regulating organizations. Exchanges have demonstrated greater stability and transparency during the

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GFC. International regulatory changes will encourage more OTC business to migrate to exchanges, even as higher capital adequacy inhibits banks.

Future directions for policy include maintaining competition together with high standards in exchanges to force them to create products and strategies to expand the current narrow user base.

### **Equity**

Trading in Indian markets is dominated by a few stocks, products, cities, and is largely short-term and cash settled. Only 1.5 percent of the population is invested in markets, only 100 large cap stocks are liquid, 90 percent trading volume in top 10 cities, and in equity and commodities. AMFs, ETFs, MSEs and single stock options, are all underperforming (FOFM, 2010). FPI inflows dominate equity markets. More competition in exchanges may induce strategies for greater domestic inclusion.

The sub-brokers households trusted disappeared from the markets, in favour of technology enabled distribution. But given the large job requirement in India, a technology plus people strategy may be more viable. Trusted technology enabled sub brokers with local knowledge should be reestablished. Some big broking houses are setting up large national chains with a good distribution network.

There is an attempt to use mobile trading to help the spread of equity culture since India had about 47 crore mobile connections in July 2010, while demat accounts, which indicate the number of investors, are only 1.6 crore. In 2010 Sebi allowed stock trading, which was already available through Internet banking, on a mobile phone platform also. Brokers have to ensure they provide secure access and encryption for internet-based securities trading using wireless technology, and also take adequate measures for user identification, authentication and access control using means such as user-ID, passwords, smart cards and biometric maps. The unique identification number used for Internet based trading will be applicable for securities trading using wireless technology.

Future directions for policy include leveraging new technology for stable expansion of domestic equity participation, in order to reduce FPI dominated equity volatility; creating an ecosystem linking banks, markets and customers to effectively meet the latter's lifestyle needs.

### **Fixed income markets**

India has a high government debt of 80 percent of GDP but the Indian debt market is underdeveloped. The G-secs market is deep, and the risk free market determined returns are attractive, with concessions such as a held-to-maturity (HTM) part, which is not marked to market. HTM was originally given to ensure banks would find it profitable to hold G-secs as the SLR was brought down and market determined interest rates rising from repressed levels led to loss of capital. G-secs available for trade in 2010 were a large 10.5 lakh crores, even after removing the HTM part. Retail holding is negligible, while banks normally hold G-secs in excess of a still high statutory liquidity requirement (SLR) of 25 percent NDTL. But secondary trade remains small. The ability to hold to maturity reduces incentives to trade and to hedge interest rate risks. 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. Risks include high interest rate volatility that the Indian system is not yet ready to face. The corporate bond market is also underdeveloped.

Future directions for policy, at this stage of market development, as two-way movement of interest rates is established, are to consider gradual reduction in the HTM component. Wider institutional and retail participation should be encouraged. But more government debt must be held by households in a domestic retail market before freer entry of foreign rupee debt funds. 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, measures to reduce the cost of issuing, for example simplifying disclosure documents for debt investments, and creating credit enhancement mechanisms.

### **Interest rate futures**

Globally, exchange traded derivatives, have 81 percent share, and interest rate futures (IRFs) dominate in these. But in Indian markets the share was only 1 percent 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, such as a shift from the synthetic ZCYC to YTM, but problems remained such as insistence on physical settlement. Initially there was lack of liquidity in the underlying since only two long-term G secs were deliverable. The

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fundamental reason for the failure of IRFs is players take positions to benefit from expected interest rate movements rather than hedge risks. This is the advice brokers give to clients.

Policy rate surprises and homeopathic doses of interest rate volatility would create a demand for IRFs. Start of the corporate repo, wider holding, lower HTM, and more active trade in G-secs would provide more users of IRFs. Development of one segment encourages another.

### **FX markets**

As elsewhere over the counter (OTC) trade conducted by banks dominates, with swaps being most widely used. Exchange traded futures were permitted in 2009 and saw rapid growth. But limitations continue such as they cannot be settled in hard currency. Day traders dominate and open interest is low. The low contract size of USD 1000, and absence of customization in futures, makes OTC the preferred option for large corporate deals. Even so there is continuous development with futures in multiple currencies and options being allowed. The RBI has slowly shifted from the earlier focus on underlying exposures to also allow indirect hedging. FIIs are still not allowed the latter. As a consequence, the offshore non-deliverable forwards grew and by 2011 exceeded the domestic market. BIS 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 are still thin; large spikes can occur without CB intervention, especially given large capital movements in a currency that is not fully convertible.

Future directions for policy: include continuous stable market development, with restrictions gradually removed, as markets deepen and the hedging habit is established. Two-way movement of exchange rates, with movements limited to a moving ten percent range will help develop markets and create the hedging habit. Strategic tightening or relaxing of existing controls can also help regulate flows according to domestic requirements and restrict volatility. Tightening of banks net open position limits proved a useful tool against one-way short positions against the rupee in the end of 2011.

These brief snapshots show the direction of steady financial development that would support domestic goals.

## **V. STRUCTURE OF REGULATION**

Improvements in domestic and global regulations are also critical for the pace of financial liberalization. The GFC gave a number of lessons for the regulatory structure EMs should

follow<sup>9</sup>. Some of their practices that turned out to have good incentive features should be adopted as part of revised global norms.

The crisis illustrated regulatory failure in advanced countries due partly to ideology—the belief in market efficiency and self-regulation, but also the US comparative advantage in finance. This generated political support for finance driven growth. Tighter regulation was thought to have a cost in terms of compliance, innovation foregone, and higher cost of funds. Both regulators and markets bought into the dominant paradigm of efficient and rational markets where failures do not occur. But markets as well as regulators failed, implying better incentives are required for markets and less discretion for regulators. Financial regulation must ensure the integrity of financial markets and that finance meets the needs of the real economy. In addition to supervision or enforcement the four basic market failures require regulatory intervention: failures of information and inclusion, behaviour that creates procyclicality and the too big to fail (TBTF) syndrome. Prolonged instability due to the European debt and US downgrade in 2011 again made it clear that pumping up financial markets alone could 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. But rules need to incentivize better behaviour, moderating the basic market failures identified. A complex enough (or principle based) rule can be 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 induces 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 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

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<sup>9</sup> This section draws on and updates Goyal (2010b and 2012).

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The key weakness the crisis has highlighted is systemic risks and procyclicality due to spillovers from individual decisions. But in the US Dodd-Frank Act systemic risk has largely been relegated to councils of regulators that could create delays. Regulators in one country do not want to be stricter than in their competitor countries. Basel 111 emphasizes loss-absorbing buffers. But these are difficult to build in bad times, 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. The latter 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 is necessary. Such coordination can push 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 either. Competition can force the choice of risky strategies. That is why external regulatory standards are so powerful. If a bank is assured its competitor will not choose risky strategies that may allow it to make more money, it will not choose those strategies either. Universal application of basic standards prevents regulatory arbitrage.

The simplicity of transaction-level regulation, based on broad patterns regulation, can make it universally adopted, thus closing exemptions and preventing competitive arbitrage. Examples are margins, position limits, taxes, loan to value ratios, and credit growth based additional sectoral provisioning. 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 micro-management 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 will allow faster liberalization in EMs.

Macro- and micro-prudential regulation each requires different skills and information. The best alignment of information and incentives occurs if Central Banks (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 UK, 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 terminated as an experiment that failed, with responsibility for banks reverting to the Bank of England.

### **Indian Regulatory Structure**

The post-1990s reform shift from micro intervention to a strategy of macro management meant a shift to regulations based on broad 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. So 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 the 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 nineties 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.

But most prescient were the macro-prudential regulations implemented much before their worldwide post-crises recommendation. Countercyclical provisioning and differentiated risk weights for bank lending to bubble-prone sectors, such as real estate and equity markets, 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 in 2010 compared to the 8 percent required<sup>10</sup>. 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: it's very low credit to GDP ratio must be allowed to rise structurally; and the large risk free statutory liquidity banks hold is not accepted as a liquidity buffer, since it is compulsory. The cost of OTC derivatives is feared to rise, although electronic platforms like the CCI are available to meet reporting requirements at reduced cost.

India had a precursor to the systemic council Dodd-Frank has prescribed. 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. The RBI governor was Chair. In 2010 a Financial Stability and Development Council (FSDC), with the Finance Minister as Chair, and the RBI governor as Chair of the stability sub-committee replaced the HLCC. 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. But 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. 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.

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<sup>10</sup> Gross NPAs as a percent of loans had fallen from 12.8 in 2000 to 2.4 in 2010. They rose slightly in 2011, but the structural improvement was much larger.

Apart from ignoring crisis lessons, giving more power to politicians, who had distorted India's financial sector to force it to fund Government, also ignores lessons from India's history. It is better to encourage independent, professional regulatory institutions with good interaction and good peer review.

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 HLCC 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<sup>11</sup>. It can plug regulatory gaps and assign responsibility with clear time lines to fulfill the objectives.

Better coordination is essential to deliver both stability and development. Modern financial products do not respect regulatory boundaries. Consider the introduction of currency options in 2010: participating members must be registered with SEBI and follow its guidelines for position limits, margins, surveillance and disclosures. But RBI retains the power to modify eligibility, limits, and margins or take any actions required for stability and orderly development of FX markets.

Sectoral regulation is best organized on a functional basis, but inevitable overlaps require a more complex definition of functions. Overlap can even be used to 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 the 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 market in corporate bonds and RBI for corporate repos. If the systemic risk regulator coordinates 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.

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<sup>11</sup> EPWRF (2009) suggest 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.

## **VI. CONCLUDING REMARKS**

In an emerging market it is natural to regard mature markets as an ideal, so that domestic systems are seen as lacking. But the crisis has exposed flaws in the finance dominated markets and regulation of the West. Countries such as China and India that followed non-standard paths have done the best. So it is worthwhile to study those paths to see what worked. It is possible the goal itself may have to be modified to some extent. The real sector must have priority since finance is a good tool but a bad master.

But even taking the goal as given, it is not correct to ignore the path 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. Domestic market liberalization includes regulation that creates the correct incentives. Future liberalization must follow the principles, which have succeeded in the past, as well as further the region's critical developmental needs, such as inclusion and infrastructure. Improved domestic markets will benefit foreign participants as well. Japan's lost decade showed that recovery from financial sector problems is difficult. Excessive financialization is imposing a large cost on Europe and the US as well.

It is necessary to ask why India and China, with some controls, have the highest growth rates in the world. 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 had to turn to the IMF for aid often; Bangladesh that retained more controls needed help only once. The 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, it did not need the IMF at all, and was able to build up substantial reserves. Moderate and sequenced external and domestic liberalization is the safe way to proceed.

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