

The Future of Financial Liberalization in South Asia

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Abstract

The paper defines financial liberalization, distinguishing between liberalization of domestic financial markets and capital account convertibility. It then examines the stages and the strategy of Indian financial reform. 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 direction of future liberalization should be such as meets Indian needs of financial inclusion, infrastructure finance, and domestic market deepening.

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1. 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, to allowing foreign entry, and to the type of financial regulation.

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 types of Government programs. The government fixed the exchange rates. There was scarcity and rationing of foreign exchange so neither the current nor the capital account of the balance of payment was convertible.

Reforms have freed markets and developed underlying institutions, but it has been a gradual process with graded restrictions on foreign entry. More openness created more volatility, but on the whole, was beneficial. The sectors with the maximum foreign entry were not the most successful in achieving domestic development goals. These goals should define the future path of future reform as the strategic removal of controls, combined with development of domestic markets continues. The paper draws out the implication for reform in different financial sectors.

The structure of the paper is as follows: after a discussion of financial liberalization in Section 2; Section 3 discusses its consequences. Section 4 draws out lessons from the experience of global crises; Section 5 links the path of future liberalization and to critical development imperatives; Section 6 gives a snapshot of domestic development issues in the financial sector; Section 7 brings out lessons for the structure and reform of regulation; before Section 8 concludes.

2. Post Reform: Liberalization

The post reform period beginning in the early nineties in India and a little later in other South Asian countries has seen considerable institutional and market development. More interest rates became market determined. In India, at the time of writing, only interest rates on savings accounts, government small savings and providence schemes are administered. Many private and foreign banks and mutual funds entered. Restructuring, computerization and competition improved banking services and parameters such as non-performing assets. There was a rise in the share of retail credit.

India used new technology effectively to create 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 corporatised and demutualized, the National Stock Exchange provided effective competition to the older BSE. A number of commodity exchanges entered. Settlement was now through clearing corporations. Derivatives were gradually introduced and soon achieved high trading volumes. Strict norms regarding disclosure of price sensitive information and conflicts of interest, contributed to reducing asymmetries of information in price discovery.

Changes in technology have had fundamental effects on the possibility of regulation, and on safe innovation. The Reserve Bank of India (RBI) continued as the regulator of banks. New financial regulatory institutions set up were the 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). In general controls gave way to market based regulation. 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, positions limits, margin requirements, and circuit filters. 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, the capital market regulator.

There were rapid developments also in 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 IOSCO/CPSS best practices. Infrastructure was created for electronic payments and real time gross settlement (RTGS), and steps taken to encourage the migration from paper money.

After an initial double devaluation of the Indian exchange rate in June 1991, it became a managed float. The degree of flexibility and market determination increased with the deepening of FX markets. The nineties saw steady depreciation, covering for India's relatively higher inflation so there was no large deviation of the real effective exchange rate (REER) established after the initial devaluation. 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.

Although the reforms established current account convertibility, with the foreign exchange regulation act (FERA) being changed to foreign exchange management (FEMA), 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. Requirements for the latter's transactions were liberalized before portfolio outflows. 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. Selective deregulation aimed to develop markets even while restricting foreign participation until they reached sufficient maturity to be able to handle volatility.

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, reforms gained momentum after 1997. Foreign banks were allowed to bring in and take capital out, remit profits, dividends and fees without any prior approval. 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 on repatriable basis. Shares could be exported and 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 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. It is subject to prior Bangladesh Bank (BB) approval, which is given only sparingly. So 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.

Reform also freed the domestic financial sector from controls. In Pakistan, SLR has been brought down to around 20 percent of total demand and time liabilities from its highest of 45 percent at one point of time. Caps on maximum lending rates of banks and 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 SECP aimed at establishing a professional agency that would improve the regulation and supervision of the securities market

Although Bangladesh's financial sector has strengthened, government interventions in the form of ceilings, moral suasion, and directed credit still exist. Accounting and reporting is non-transparent. Banks are free to fix rates of interest on their deposits of different types after withdrawal of restriction on the floor rate of interest in 1997. Banks are also free to fix their rates of interest on lending except for export sector, which was fixed at 7 percent per annum with effect from January 10, 2004. SLR has been changed in the past decade but on an average has been around 20 percent.

In both countries the debt market remains underdeveloped. No benchmark rate or yield curve exists because of absence of long-term debt instruments and administered interest rates on popular government instruments. It also suffers from lack of regulation, infrastructure, expertise and innovation. Other problems are absence of institutional investors because of various impediments and passive capital market.

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.

In sum these countries have been proceeding on the same liberalization path as India, with some lags. Pakistan has the most open capital account.

3. Consequences of Financial Liberalization

Trend growth rose in the post reform period, but so did volatility. Opening out had coincided with a period of major international financial crises. But conservative

regulation and the gradual approach meant the financial sector did not undergo a crisis.

A distinction was made between different types of Private Foreign Investments¹ (FIs).

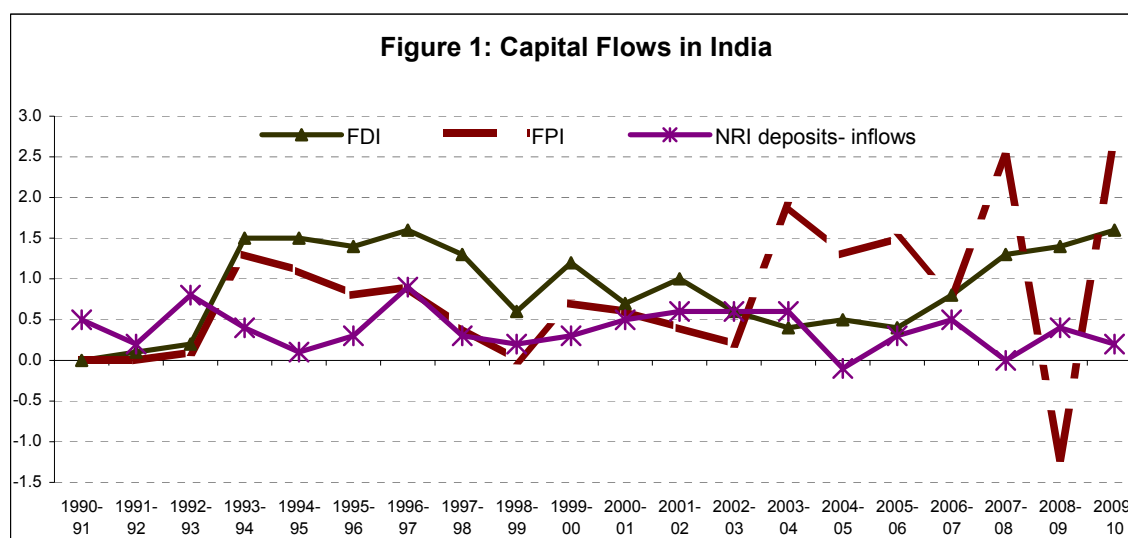


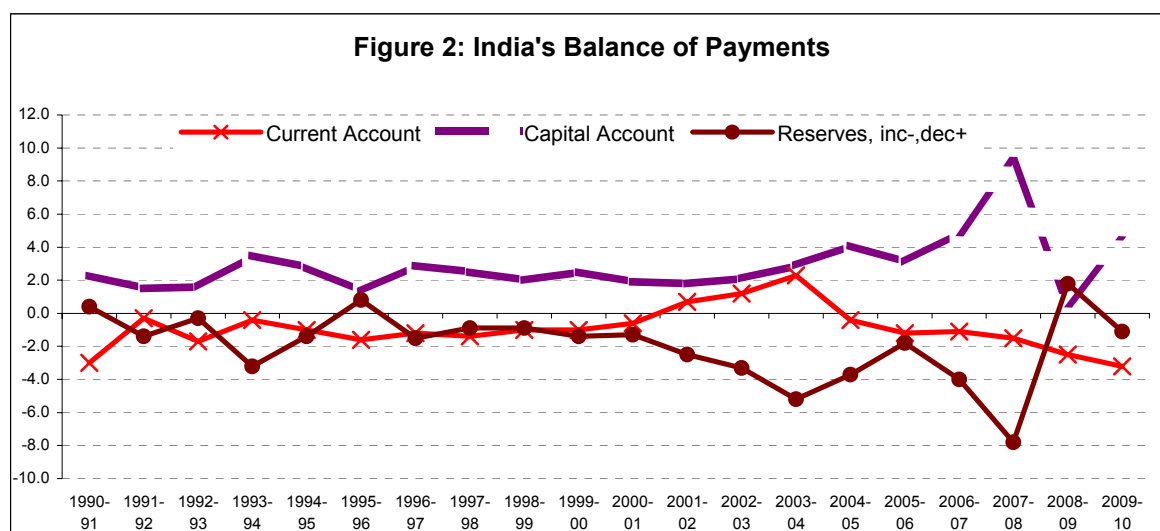
Figure 1 shows some of the categories of inflows as a percentage of GDP. There was steady acceleration in FDI, which is an equity type flow, and higher levels continued despite the global crisis. The Figure also shows how the absorptive capacity of the economy increased. USD 3b in the beginning of reform came to about 1.5 percent of GDP and \$29b in 2007-08 came to a similar ratio as GDP had increased. 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. NRI flows did not have the same amplification. They 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.

Figure 2 shows that reserve accumulation was the mirror image of the capital account. It was volatile capital flows that were absorbed as reserves², while the current account

¹ 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/~ashima. Figures quoted, unless otherwise mentioned, are from IMF, RBI, Ministry of Finance, SPB and BB websites.

² 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.

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, the sterilization of reserve accumulation, to maintain targeted rates of money supply growth imposed large interest costs borne by the Government, RBI and banks. The RBI has to pay more on Government bonds it sells in India compared to what it earns on assets held abroad.



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 loans. Domestic interest rates exceeding foreign and an exchange rate expected to appreciate 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 distortions, even while selective relaxation for longer-term debt made credit available for large corporates and for infrastructure funding.

Partial capital convertibility gave flexibility along the line of control, making selective tightening feasible if necessary. Additional instruments were available to tackle the policy trilemma, giving some monetary autonomy even under volatile capital inflows. Fine-tuning was possible. For example, stricter end use criteria were imposed for firms bringing funds in during periods of excessive inflows. 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,

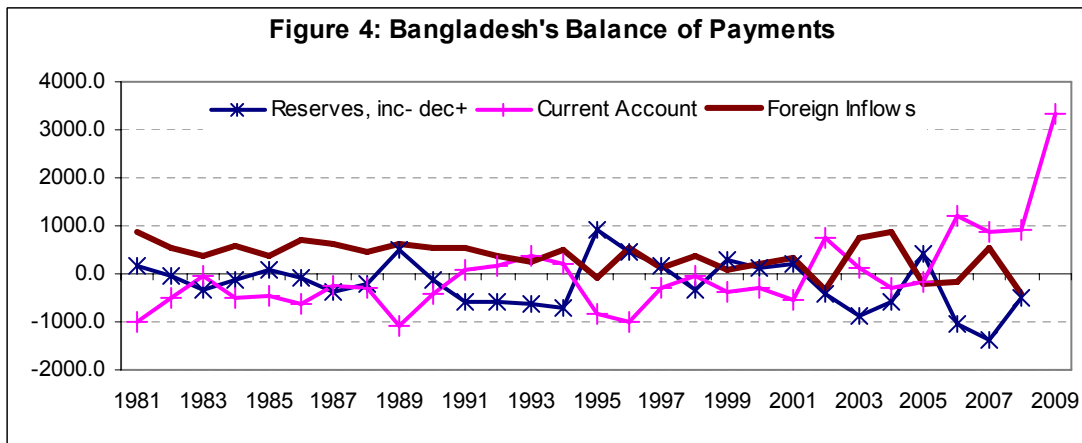
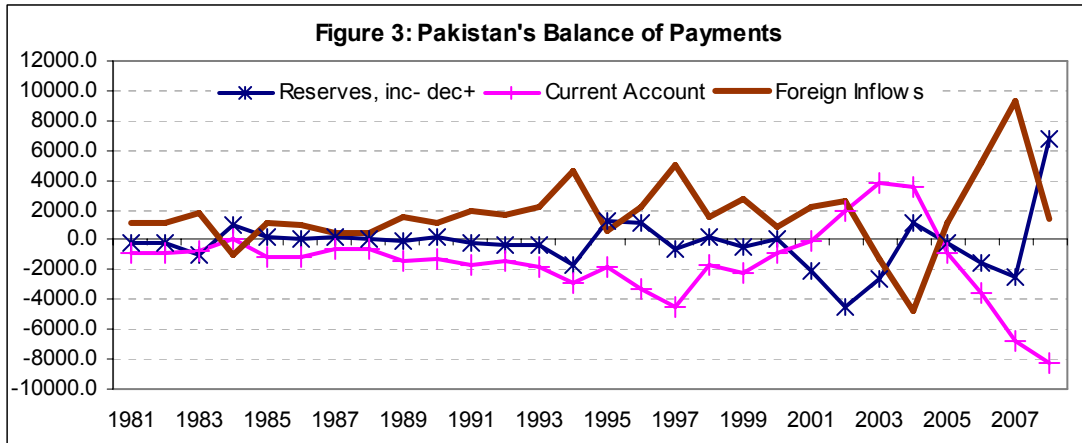
selective easing of outflows by domestic residents and further trade liberalization were used as another way of absorbing inflows.

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. Temporary capital inflows do not always reflect fundamentals and cannot determine the equilibrium exchange rate.

India's policy strategy of "muddling through" followed a well thought out sequence whereby full capital account liberalization was to come after deepening domestic markets, and better government finances. 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 from foreign inflows. 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 have a lower probability of crisis (Ostroy et. al. 2010).

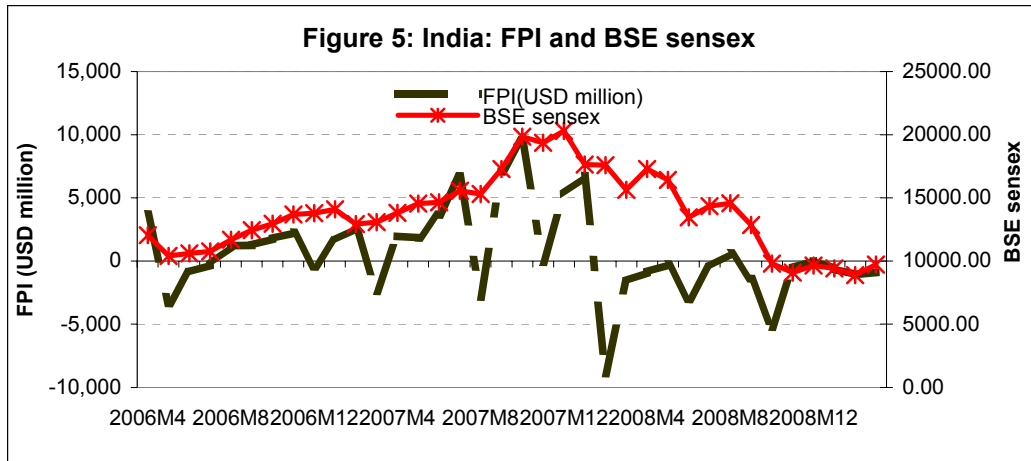
In Pakistan and Bangladesh (Figure 3 and 4, in USD billions) the change in reserves is not the mirror image of capital inflows³. First, the current account was much more volatile, reserves had to be frequently used to finance it. Second, inflows were not so substantial and, at least for Pakistan were often the result of IMF loans. Bangladesh saw a sharp improvement in its current account after 2005, while for Pakistan it was the reverse.

³ Due to lack of data on capital flows they are derived as change in reserves plus current account deficit for Pakistan and Bangladesh.



4. Crisis Lessons

Foreign inflows do make more resources available, demonstrate better organization and technology, offer a stimulus to local investment, give an opportunity for better allocation of world savings, and for better price discovery in markets. But inflows to emerging markets (EMs) are subject to sudden stops or reversals due to infectious panics unrelated to domestic fundamentals. The global financial crisis demonstrated this again.



FDI was relatively stable, suggesting it is worth reducing hurdles to entry. FPI was volatile. Figure 5 shows how FPI affected the stock market index. But it resumed soon with Indian growth prospects, and also demonstrated the risk sharing effect. 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. Despite higher volatility in narrow markets, the FPI inflows did benefit firms. Loans became easier to get and more venture capital entered, in the high growth period of 2003-08, as the ratio of gross investment to GDP rose from 25.2 to 39.1, and again as investment demonstrated a sharp recovery in 2010.

But households did not benefit. Retail participation shrank. Reforms raised entry costs for the retail investor. The share of household financial savings in shares and debentures post-reform were low at 5.1 percent in 2005-06 compared to 23.3 percent pre-reform in 1991-92. Pre Lehman (2007-08) they had increased to 12.5 percent; but post (2007-08) collapsed again to 2.6 percent. Free foreign entry was allowed in mutual funds, but they focused on high-end customers, and on firms. 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 have taken place but more broad basing is required. 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.

The sharp rise in inflows 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 emerging markets (EMs) are in different phases of their macroeconomic cycle. Higher growth in EMs and the near zero interest rates at home is leading to portfolio rebalancing towards EMs. The promised tightening of global regulations has been relegated to the future and large Western financial institutions are being encouraged to improve their impaired profits through trading. The hype being built up about emerging Asia is pushing them here, just as the hype about the “miracle economies” pushed herds of investors into East Asia, building up bubbles, which eventually burst. Controls and prudential requirements are an essential line of defense. They can be designed to be market friendly. 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 makes it possible to discriminate between origins and types of flows together with central registration that reduces transaction costs. Pure controls involve restrictives on cross border flows by residence. Market based controls include un-remunerated reserve requirements and taxes. For debt -pure controls must continue, but for portfolio flows

the latter set may be considered if necessary, ideally as part of a global agreement on handling capital account distortions.

Capital resists taxes by arguing that 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 one country is not doing it alone.

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 times⁴. 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 Bangladesh⁵ did not have to go to the IMF at all. Its good growth performance led to large inflows of private capital. So while strategic controls are protective, so is domestic market deepening.

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 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 the country to unnecessary risk.

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.

⁴ There were two arrangements with the IMF in 1997 one in each of 1993, 1995, 2000, 2001, and 2008.

⁵ 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.

Asian Integration

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. But reform of the International Financial System (IFS), which could have prevented the global crisis, was not carried out since lender countries and interests dominated international financial institutions Goyal (2010a). Aid was arranged much faster for Mexico in 1995 than it was for Asia in 1997. So Asia was pushed to adopt self-insurance and cooperation measures that improved its bargaining position and helped it survive the global crisis.

South Asia is inadequately involved in these, although there are beginnings, which need to be pursued vigorously. There are many advantages from coordination, given the continuing dollar weakness, resistance to and slow pace of reform in the international financial architecture. The large intraregional Asian trade could benefit from financing within the region⁶. High Asian growth and trade expansion provide incentives for such moves. Stable Asian savings would become available to finance large Asian infrastructure needs. Credit markets freeze due to problems in Western banks partly caused the crash in Asian exports in 2008.

Alternatives to Western markets, currencies and institutions would make the globe more stable. Regionalism is not incompatible with globalization. It can even raise the probability of optimal globalization by improving the balance of global power and stability. A consensus may more easily be hammered out at the regional level and then taken to the international forums.

Leaders of the 10 ASEAN member countries along with the PRC, Japan, and Korea initiated the ASEAN+3 process in 1997, with initial focus on macroeconomic and financial issues. Results included setting up regional liquidity support arrangements through the Chiang Mai Initiative (CMI), establishment of the Asian Bond Fund (ABF), and progress on the Asian Bond Market Initiative (ABMI). Medium-term aims included the establishment of a regional financing facility, a mechanism for

⁶ 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, its liabilities to either North America or the European Union were more than three times as much.

closer coordination on exchange rates, and establishment of regional surveillance. The Economic Review and Policy Dialogue (ERPD) was the first step working through information exchange, policy discussions, and peer reviews. There was some progress but the absence of a secretariat and low involvement of CB governors limited its efficacy⁷.

Among these bodies South Asian countries are involved only in the Asia-Europe Meeting (ASEM), which has financial market development and strengthening economic cooperation between Asia and Europe as part of its limited agenda, and SEANZA (Southeast Asia, New Zealand and Australia), which is concerned with capacity building among central banks. India is part of the East Asia Summit (EAS), comprising the ASEAN + 3 members, Australia, India and New Zealand, concerned with strengthening regional economic cooperation among members. Many of these bodies are handicapped by the absence of secretariats, poor focus and coordination and conflicts of interests among members, so progress is slow. For example, EAS uses the ASEAN Secretariat.

The global financial crisis gave another push to efforts to promote regional financial stability, including multilateralization of the CMI. A crisis-affected member could immediately obtain liquidity support for the first 20 percent of USD 90 billion bilateral swap agreements (BSAs) in the CMI, but the remaining 80 percent was linked to an IMF program and its conditionality. Potential creditors, including Japan and the PRC were concerned to avoid creating moral hazard. Demands for assistance could be due to poor policy fundamentals, requiring effective adjustment. The main ASEAN swap arrangement, which allowed member banks to swap their local currencies with major international currencies, was only US\$2 billion on April 2009.

When hit hard by currency speculation and capital flow reversals in 2008, Korea found the CMI inadequate. Instead, it went to the US Fed for precautionary liquidity support. The solution was to make the ERPD effective and move to multilateralization of the CMI. The CMIM, signed on 24 December 2009, will have a more institutionalized structure, with an independent surveillance unit under the guidance

⁷ This section is based on Goyal (2010), Kawai (2009, 2010) and Jung (2008).

of an advisory panel of experts, based in Singapore. The quantum of support has increased and an active EPRD will enable it to be made available in a more flexible manner, comparable to the IMF's FCL, but delinked from the IMF. The CMIM includes all the low-income ASEAN members, which were excluded from the CMI BSAs. This more inclusive arrangement opens up the possibility of the participation of other countries.

Studies are also taking place on medium- to long-term currency coordination to avoid competitive devaluations. Since the CMIM weights have been agreed to they can form the basis for individual currency weights in a proposed regional monetary unit, which could act as a benchmark for individual currencies, limiting their relative movements.

The ABF, a fund comprising 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 ABMI, and building a common market structure: securitisation, a credit guarantee, credit rating and settlement system, essential for developing regional market interaction.

A well functioning ABM would make the Asian financial system more balanced by encouraging markets as well as banks, provide alternative avenues for savings and sources for infrastructure investment, recycle 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.

5. Future Liberalization and Critical Development Imperatives

Future domestic and external liberalization is likely to progress fastest in the directions that satisfy critical development needs. Since India leads other South Asian countries in market and institutional development we focus on India now. The needs are:

Inclusion

Although financial inclusion is a major aim, the reforms have not been so successful in this. The idea of inclusion has to expand beyond just availability of credit to expansion of banking, insurance and other financial services.

Financial markets have been unable to leverage the shampoo sachet effect: that is to evolve a low denomination strategy 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 removed, their confidence built up, and positive incentives offered. Possible measures include:

- Education of investors, increasing financial literacy
- Making one point disinterested information available
- 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

The sub-brokers that 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.

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 12 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 is willing to participate. Such instruments can enable its entry. Experience has been gained in PPP contracts with good incentive features. 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).

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.

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 SPAN to cover tail risks. Post crisis worldwide there is a move to more exchange traded instruments. But currently day trading dominates in many instruments since physical delivery is limited. It is necessary to increase contrarian positions, open positions and hedging.

6. Inclusion and Domestic Development

Banks

Indian banks, especially private banks, provide better services to large corporates and HNIs. For example average loan rates for blue chips was 5-7% but for MSEs it varied over 9-11.25%. As established firms began raising credit abroad at cheaper rates, banks turned to retail credit, consumer durable and housing finance expanded. The SARFAESI Act 2002, and fledgling credit bureaus making credit histories available have contributed to the expansion of credit. Banks also participate in infrastructure finance, but do not have the scale and size to meet large financing needs. Indian credit deposit ratios remain one of the lowest in the world. There is considerable scope for expansion.

Banking penetration is poor partly because technology was not available. But technology has improved. Although banks have been slow in making optimum use of technology. RBI wants to give banks the opportunity to leverage new technology and widespread agent network.

The very rapid growth in mobile usage, their wide penetration, competition and dynamism in designing new products, suggests permitting mobile financial services would enable rapid strides in financial inclusion. Delays and transaction costs would fall for users. 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. Whereas, 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.

The provision of additional banking services, increasing access to credit, and raising the level of savings, for those currently excluded from the formal financial sector is the additional advantage of bank involvement even in mobile financial services. 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.

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. The RBI in 2008-09 did do away with encryption for amounts less than Rs 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.

It 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. There is a problem in extending deposit insurance to non-banks.

Markets

The new stock exchange established, NSE, was supposed 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 a 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 has not been able to do. NSE makes large profits and rewards management while transaction costs remain high for users. 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 lockin customers and create entry barriers to increase profits. And without competition transaction charges will not come down for consumers.

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, and with for profit corporations in a network industry competition is important, even while high standards are enforced on exchanges as self-regulating organizations.

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 have been able to dominate equity markets. More competition in exchanges may induce strategies for greater domestic inclusion.

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, already available through Internet banking, on a mobile phone platform. Brokers will have to ensure that 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.

Fixed income markets

The Indian debt market is underdeveloped, and India has a high government debt of 80 percent of GDP. The G-secs market is deep but retail holding is negligible. Banks are forced to hold this through a still high statutory liquidity requirement (SLR) of 25 percent NDTL. This must be brought down and more government debt held by households in a domestic retail market before freer entry of foreign rupee debt funds. 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 Indian households are not yet ready to face. Even after removing the captive held-to-maturity part, which is not marked to market, G-secs available for trade in 2010 were a large 10.5 lakh crores.

The corporate bond market is underdeveloped. Suggestions on domestic reforms required include rationalizing stamp duty, incentivizing development of market maker, permitting pension type funds to invest in such instruments, support mechanism reducing cost of issuing, for example by simplifying disclosure documents for debt investments, and creating credit enhancement mechanisms.

Interest rate futures

Globally exchange traded derivatives, comprise 81 percent, and 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 interest rate futures 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 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. To change this short-term interest rate surprises are required. Wider holding and more active trade in G-secs and start of the corporate repo would provide more users. Development of one segment encourages another.

FX markets

As elsewhere OTC conducted by banks dominates, with swaps being most widely used. Exchange traded futures were permitted only in 2009 and saw rapid growth. But limitations continue such as they cannot be settled in hard currency, the low contract size of USD 1000 makes OTC the preferred option for large corporate deals. So day traders dominate and Open Interest is low. Even so there is continuous development with futures in multiple currencies and options being allowed. The RBI has been expanding permissions from the earlier focus on underlying exposures to also allow indirect hedging. 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.

These brief snapshots show the steady market developments and the sequence of development on the long path still remaining.

7. Structure of Regulation

The crisis also gives lessons for the regulatory structure India should follow⁸. The reasons for the regulatory failure it illustrated in advanced countries were partly 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.

The crisis 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 rule can be closer to a principle-based approach, yet reduce 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 (Brunnermeier et. al. 2009) (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

⁸ This section is based on Goyal (2010c)

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

Global coordination of basic prudential standards is also 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. Such regulatory improvement and harmonization across countries will allow faster liberalization.

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 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

Regulators used a combination of restrictions, supervision, and incentives with a wary eye on market failure. Controls had been reduced with steady market development. But 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, and 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 plagued 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 implies Indian banks are in such good health that the cost of Basel III compliance will be low. Banks tier I capital to risk weighted assets is 9.3 already compared to the 8 percent required. Some issues for India are the credit to GDP ratio is very low and must be allowed to rise structurally; the cost of OTC derivatives will rise; and the SLR is not accepted as a liquidity buffer, since it is compulsory.

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 the RBI governor as Chair of the stability sub-committee is to replace the HLCC. The proposal is a diluted response a series of reports from committees 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 the CB is being given more responsibility for financial stability. India was unique in moving towards 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.

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

The Indian regulatory structure, is however, overweight on stability. Development is slow. Since coordination is poor among government agencies, the FSDC should function as a strengthened HLCC. 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 systemic stability and market development⁹. 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

⁹ EPWRF (2009) suggest creating a Financial Market Development Agency reporting to the Government as in New Zealand.

follow its guidelines for position limits, margins, surveillance and disclosures. But RBI retains the power to modify eligibility, limits, 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 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 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. 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.

8. 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; 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. Finance is a good tool but a bad master; the real sector must have priority.

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 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 India's critical developmental needs, such as inclusion and infrastructure. Improved domestic markets will benefit foreign participants 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 several shocks and had to turn to the IMF for aid often; Bangladesh that retained more controls needed help only once. India continued with strategic controls and had more successful domestic institutional and market deepening. It did not need the IMF at all, and was able to build up substantial reserves. So moderate and sequenced external and domestic liberalization is the way to go.

References

Brunnermeier, Markus K, Andrew Crockett, Charles A Goodhart, Avinash Persaud, Hyun Song Shin (2009): "The Fundamental Principles of Financial Regulation", *Centre for Economic Policy Research*. July. Accessed in August 2009 from <http://www.cepr.org/pubs/books/P197.asp>.

Caballero, Ricardo and Arvind Krishnamurthy (2004). "Smoothing sudden stops." *Journal of Economic Theory*.

FOFM (Future of Financial Markets Research) (2010): Indian Financial Markets Reforms Report, extracts available at www.fofm.in/ifmr.

Goyal, Ashima (2010a): Global Financial Architecture: Past and Present Arguments, Advice, Action. *Margin-The Journal of Applied Economic Research*. 4(2). pp. 233-247. Sage publications: New Delhi.

Goyal, Ashima (2010b): 'Asian Clearing Union: Current Status and the Way Forward' ADB project report.

Goyal, Ashima (2010c): 'Regulatory Structure for Financial Stability and Development', *Economic and Political Weekly*, XLV (39) September 25.

Goyal, Ashima (2006): "Regulation and De-regulation of the Stock Market in India". Chapter 9 in M. Ramesh and Michael Howlett (eds.) *Deregulation and its Discontents: Re-Writing the Rules in Asia*, pp. 186-192 (UK: Edward Elgar)

Goyal, Ashima (2002): "Reform Proposals from Developing Asia: Finding a Win-

Win Strategy”. Chapter 7 in *Debating the Global Financial Architecture*, Leslie Elliott Armijo (ed.), SUNY Press Global Politics series, (ed.) James Rosenau, (New York: SUNY Press.)

Jung J.Y. (2008): “Regional financial cooperation in Asia: challenges and path to development”. BIS Paper No 42. pp. 120-135. October.

Kawai, Masahiro (2010): “From the Chiang Mai Initiative to an Asian Monetary Fund”. Paper prepared for the conference on the “Future Global Reserve System” organized by Columbia University in partnership with ADB and ADBI in Tokyo on 17-18 March 2010.

Kawai, Masahiro (2009): “Reform of the International Financial Architecture: An Asian Perspective”. *ADB Working Paper Series No. 167*. November.

Ostry, Jonathan D., Atish R. Ghosh, Karl Habermeier, Marcos Chamon, Mahvash S. Qureshi, and Dennis B.S. Reinhardt (2010): “Capital Inflows: The Role of Controls”, IMF Staff Position Note, SPN/10/04, February 19, 2010.