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Financial Development in Emerging Markets: The Indian Experience

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Abstract

Financial markets that function well are crucial for the long-run economic growth of a country. This paper, in the first instance, looks at how the financial development of an economy can be measured. It then traces the financial development of India through the 1990s to the present, assessing the development of each segment of financial markets. In doing so, it highlights the dualistic development of the financial sector. Finally, the paper makes an attempt to offer an explanation of this dualistic development and proposes a road map for the future development of financial markets in India.

JEL Classification: E44, G18, G28, N25

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1. INTRODUCTION

It is well recognized in economic literature that efficient and developed financial markets can lead to increased economic growth by improving the efficiency of allocation and utilization of savings in the economy. Better functioning financial systems ease the external financing constraints that impede firm and industrial expansion. There is a growing body of empirical analyses, including firm-level studies, industry-level studies, individual country studies, and cross-country comparisons, that prove this strong, positive link between the functioning of the financial system and long-run economic growth. Specifically, financial systems facilitate the trading, hedging, diversifying, and pooling of risk. In addition, they better allocate resources, monitor managers and exert corporate control, mobilize savings, and facilitate the exchange of goods and services.[1] Thus well-functioning financial markets are critical, especially for emerging market economies (EMEs).

India is one of the five countries classified as big emerging market economies by the World Bank. This list also includes People's Republic of China (PRC), Indonesia, Brazil, and Russia. These countries have made the critical transition from a developing country to an emerging market. The World Bank has predicted that these five biggest emerging markets' share of world output will have more than doubled from 7.8% in 1992 to 16.1% by 2020.[2] On account of its size and improved economic performance in the last decade or so, India is contributing significantly to the increase in trade and economic activity, and thus to world economic growth. Hence it is important to look at the manner in which financial development has occurred in India and how it has been instrumental in shaping the contours of India's economic progress and in turn shaped by it. It will also be instructive to study what more India must do to join the league of countries known for their efficient financial sectors and markets.

The first section of this chapter explores how financial development of an economy can be measured. Using mainly the World Economic Forum (WEF) financial development indicators, one can see where emerging market economies (EMEs) stand in terms of domestic financial development vis-à-vis the developed economies and where India stands among the EMEs in the area of financial development. The second section traces the financial development of India through the 1990s to the present, looking at each segment of the financial markets and comparing development indicators with those of peer countries. This analysis highlights the dualistic development of the financial sector in India. The final section attempts to explain this dualism and sets a roadmap for future development of financial markets in India.

2. MEASURING FINANCIAL DEVELOPMENT

Different sets of indicators have been used in attempts to measure the financial development of economies. Starting in 1999, the World Bank began publishing a database on financial development and structure across countries. The most recent World Bank study updates and expands the financial development and structure database.[3] This database has a select number of financial system indicators (around thirty) including:

[1] Levine (1997).

[2] World Bank (1997).

[3] See Beck and Demirgüç-Kunt (2009).

i. indicators for the size of the financial system, including liquid liabilities to GDP, currency outside banking system to base money, financial system deposits to GDP, and so forth;

ii. banking system indicators for size, structure, and stability;

iii. indicators for capital markets and the insurance sector; and

iv. indicators for financial globalization, such as international debt to GDP and remittance inflow to GDP.

However, this database does not rank countries on financial development indicators.

Other studies by the World Bank provide indicators on regulation and supervision of banks, coverage and structure of deposit insurance schemes, and indicators of barriers to banking access in developing and developed countries.[4]

In another attempt to measure financial development, an occasional paper of the European Central Bank constructs, on the basis of an original methodology and database, composite indexes to measure domestic financial development in twenty-six emerging economies for 2008, using mature economies as a benchmark.[5] The study uses twenty-two variables, grouped according to three broad dimensions: institutions and regulations, size of and access to financial markets, and market performance. According to this index, Republic of Korea is ranked sixth among thirty countries, PRC is fourteenth, and India ranks twenty-second. This paper finds that India performed relatively better as regards its financial markets and nonbank institutions but requires improvements in the business environment as well as bigger and more efficient banks.[6]

Recognizing that there is a lack of consensus on how to define and measure financial system development, the WEF released its first annual Financial Development Report (FDR), which provides an index and ranking of fifty-two of the world's leading financial systems.[7] The 2009 FDR ranks fifty-five countries based on over 120 variables spanning institutional and business environments, financial stability, and size and depth of capital

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[4] One of the databases of the World Bank Group (of the International Financial Corporation) is the Doing Business database, which provides a quantitative measure of regulations for starting a business, getting credit, protecting investors, and the like. This database has a number of limitations and hence does not fully capture the financial development of a country. See www.doingbusiness.org.

[5] Dorrucci, Meyer-Cirkel, and Santabárbara (2009).

[6] The domestic financial development index calculated in Dorrucci, Meyer-Cirkel, and Santabárbara (2009) captures three dimensions of financial markets. First, there is the institutional dimension, which includes the regulatory and judicial framework and the quality of institutions. Second is the market dimension, which includes the traditional measures of size and access to finance (stock market value as a percentage of GDP, private bond market as a percentage of GDP, total bank claims as a percentage of GDP, and assets of nonbank financial institutions as a percentage of GDP); financial innovation; and residents' access to finance. The third dimension is market performance, including measures of technical efficiency, liquidity, and distribution of domestic assets base.

[7] WEF (2008).

markets, among others, and is thus one of the most comprehensive databases available on financial development.[8]

For the purposes of the 2009 FDR and its index, financial development is defined as "the factors, policies, and institutions that lead to effective financial intermediation and markets, and deep and broad access to capital and financial services."[9] In accordance with this definition, the FDR recognizes various aspects of development of a financial system, presenting them as the "seven pillars" of the financial development index (FDI). These fall into three broad categories:

i. *Factors, policies, and institutions:* the "inputs" that allow the development of financial intermediaries, markets, instruments, and services. This comprises three pillars: institutional environment, business environment, and financial stability.

ii. *Financial intermediation:* the variety, size, depth, and efficiency of the financial intermediaries and markets that provide financial services. This includes three more pillars: banks, nonbank entities, and financial markets.

iii. *Financial access*: the last pillar, related to access of individuals and businesses to different forms of capital and financial services.[10]

One of the key design principles of the FDI is the inclusion of a large number of variables relevant to the financial development of both emerging and developed economies. Emphasis is placed on the component parts of the FDI as a framework for analysis, following which a very conservative approach has been taken to the weighting of variables. The FDR has generally weighted different components of the index equally. Standardization is done to permit aggregation and cross-country comparisons. This is accomplished by rescaling the variables on a 1–7 scale, 1 being the least advantageous to financial development and 7 being the most advantageous. In some instances, the interaction among different variables is also captured because certain variables can be considered more beneficial in impact in the presence of others.

The FDI developed by the WEF, like other such indexes on financial development, has many limitations, both conceptual and methodological as well as data related. The FDR recognizes that limitations also exist due to the rapidly changing environment and the unique circumstances of some of the economies covered. Yet, in its attempt to establish a comprehensive framework and a means for benchmarking, it provides a useful starting point. The FDR is unique in the comprehensiveness of the framework it provides and the richness of relevant data it brings to bear on financial system development.

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[8] WEF (2009).

[9] WEF (2009, p. xiii).

[10] WEF (2009, appendix A). The subpillars under each of the seven pillars of the FDI are, for the institutional environment: financial sector liberalization, corporate governance, legal and regulatory issues, and contract enforcement; for the business environment: human capital, taxes, infrastructure, and cost of doing business; for financial stability: currency stability, banking system stability, and risk of sovereign debt crisis; for banking financial services: size index, efficiency index, and financial information disclosure; for nonbanking financial services: initial public offering activity, merger and acquisition activity, insurance, and securitization; for financial markets: foreign exchange markets, derivatives markets, equity market development, and bond market development; and for financial access: commercial access and retail access.

The 2009 FDR places most of the developed countries in the top rankings, with the United Kingdom holding the first rank. Among the emerging economies, Malaysia places at the top, ranking twenty-second, followed by Republic of Korea and PRC. India is thirty-eighth in its overall ranking.[11] Table 1 presents India's rankings on various financial development parameters vis-à-vis other important emerging markets.

Table 1: Rankings of Select Emerging Economies, 2009

Country	Overall rank	Factors, policies and institutions			Financial intermediation			Financial access
		Institutional environment	Business environment	Financial stability	Banks	Nonbanking companies	Financial markets	
Malaysia	22	22	30	13	12	25	29	22
Republic of Korea	23	31	16	28	22	18	20	52
People's Republic of China	26	35	40	23	10	12	26	30
South Africa	32	27	36	31	30	32	30	47
Brazil	34	42	47	15	35	15	37	31
Thailand	35	33	31	36	34	47	36	29
India	*38*	*48*	*48*	*46*	*39*	*17*	*22*	*48*
Russia	40	53	34	39	55	4	41	49

Source: WEF (2009).

It would a fair summary to say that as per these reports, based on reasonably standard and agreed criteria, India does not rank very high in its overall score of financial development. However, it is relatively well placed in terms of development of nonbanking financial services (seventeenth) and financial markets (twenty-second).[12] Within the financial markets, India fairs well in development of its foreign exchange markets and derivatives markets. Some of the subindicators in which India ranks well are regulation of securities exchanges (ninth) and currency stability (tenth). However, the country's institutional environment is considerably weaker, ranking forty-eighth, a consequence of its lower levels of financial sector liberalization as well as a low degree of contract enforcement. India's business environment is also affected by two particular challenges: an absence of adequate infrastructure and the high cost of doing business. These areas of difficulty translate into highly constrained financial access.

3. FINANCIAL DEVELOPMENT: THE INDIAN EXPERIENCE

Table 2 summarizes some select macroeconomic indicators of the Indian economy. The highlights of India's growth story since the 1990s have been:

i. an average GDP growth rate of 7.2% achieved over 2000–01 to 2008–09, with an increasing share of services in GDP;

ii. high GDP growth driven by domestic demand, both consumption and investment;

[11] India ranked thirty-one out of fifty-two countries in the 2008 FDR (WEF 2008).

[12] Nonbanking financial companies, as per the definition in the FDRs, include initial public offering activity, merger and acquisition activity, insurance, and securitization.

iii. a high average savings rate of 30.3 and an investment rate of 30.4 as a percentage of GDP over the 2000–01 to 2008–09 period; and

iv. increasingly important external trade and external capital flows, as evidenced from the share of merchandise trade to GDP increasing to 35% in 2007–08 from 23.7% in 2006–07. Likewise, two-way gross capital flows as a share of GDP were 41.8% during the 1990s and increased to 77.9% over 2000–09. They stood at 112.4% in 2008–09.

Table 2: Select Macroeconomic Indicators, India, 1951–2009
% of GDP

Indicator	1951–52 to 1959–60 (average)	1990–91 to 1999–2000 (average)	2000–01 to 2008–09 (average)
Average GDP growth	3.6	5.7	7.2
Agriculture	53.4	28.4	20.5
Services	29.7	51.5	54.4
Gross domestic saving rate	9.8	23.0	30.3
Gross fixed capital formation rate	11.1	23.6	30.2
Total foreign trade	13.3	19.6	35.7
Two-way gross capital flows	n.a.	41.8	77.9

Source: Central Statistical Organization, Reserve Bank of India (RBI).

With acceleration in economic growth and a significant increase in savings and investments in the country, a discussion on the role of finance becomes important as this can have major policy implications. To be able to appreciate the linkage between growth and financial development, I first trace out the historical evolution of financial markets in the country.

3.1 Historical Evolution of Financial Markets

The financial system and infrastructure of a country, at a given point in time, is the result of its own peculiar historical evolution. This evolution is shaped by the continuous interaction between all the players in the system and public policy interventions over time. These policy interventions are also a reflection of the thinking of regulators and governments of the time as to the acceptable and desirable balance between innovation and stability, and between the role of state and the markets.

The evolution of Indian financial markets and the regulatory system has also followed a similar path. For instance, India began with the central bank, Reserve Bank of India (RBI), as the banking sector regulator, and the Ministry of Finance as the regulator for all other financial sectors. Today, most financial service providers and their regulatory agencies are now in place. The role of regulators has evolved over time from that of an instrument for planned development in the initial stage to that of a referee of a relatively more modern and complex financial sector at present.

Over this period, a variety of financial sector reform measures have been undertaken in India, with many important successes. An important feature of these reforms has been the attempt of the authorities to align the regulatory framework with international best practices,

keeping in view the needs of the country and domestic factors. These reforms can be broadly classified as steps taken towards:

i. liberalizing the overall macroeconomic and regulatory environment within which financial sector institutions function,

ii. strengthening the institutions and improving their efficiency and competitiveness, and

iii. establishing and strengthening the regulatory framework and institutions for overseeing the financial system.

The following pages display, in tabular format, the developments that have taken place in each of the segment of the financial market, namely, securities, debt, foreign exchange, banking, and insurance, and also make an assessment of growth and development in each of these segments.

3.2 Securities Markets

Table 3 outlines the status of the securities markets before 1992 and by 2009.

Table 3: Developments in Securities Markets, pre-1992 versus 2009

Features	Pre-1992	2009
Regulator	No specific regulator, but central government oversight	A specialized regulator for securities market (SEBI) created in 1992, vested with the powers to protect investors' interest and to develop and regulate securities market. SROs strengthened
Securities	Limited number of traditional instruments	Expanded to cover government securities, units of CISs and MFs, derivatives of securities, security receipts
Form of securities	Physical	Dematerialized through enabling legislation (1996–97)
Regulatory approach	Merit-based regulation	Disclosure-based regulation (1992)
Intermediaries	Some of the intermediaries (stock brokers, authorized clerks) regulated by the SROs	A variety of specialized intermediaries emerged. They are registered and regulated by SEBI (also by SROs in some instances). They as well as their employees are required to follow a code of conduct and are subject to a number of compliances. All participants are identified by a unique identification number
Access to market	Granted by the central government	Eligible issuers access the market after complying with the issue requirements as detailed in regulations under the SEBI Act, 1992
Disclosure	Voluntary, vague, scanty and nonstandardized	Standardized, systematic, and at par with the international standards
Pricing of securities	Determined by the central government	Determined by market, either by the issuer through fixed price or by the investors through book building (1992)
Access to international market	No access	Corporations allowed to issue ADRs and GDRs and raise ECBs. ADRs and GDRs have limited two-way fungibility. MFs also allowed to invest overseas Foreign institutional investors allowed to trade in Indian markets

Features	Pre-1992	2009
Corporate compliance	Very little emphasis	Emphasis on disclosures, accounting standards, and corporate governance
Mutual funds	Restricted to public sector	Open to private sector and emergence of a variety of funds and schemes
Exchange structure	Mutual not-for-profit exchanges	For-profit corporate, demutualized exchanges mandated through legislative amendments in the securities legislation (2004)
Trading mechanism	Open outcry, available at the trading rings of the exchanges; opaque, auction or negotiated deals	Screen-based trading system; orders are matched on price-time priority; transparent trading platform accessible from all over the country
Aggregation of order flow	Market fragmented by geographic distance; order flow unobserved	Order flow observed. The exchanges have open electronic consolidated limit order book
Anonymity in trading	Absent	Complete
Settlement cycle	14-day account period settlement, not always followed	Rolling settlement on T+2 basis (1999–2000)
Counterparty risk	Present	Absent with clearing corporations and clearing houses acting as central counterparty
Form of settlement	Physical	Mostly electronic
Basis of settlement	Bilateral netting	Multilateral netting
Transfer of securities	Cumbersome. Transfer by endorsement on security and registration by issuer	Securities are freely transferable. Transfers are recorded electronically in book entry form by depositories
Systemic risk management	No focus on risk management	Comprehensive risk management system at the exchanges encompassing capital adequacy, limits on exposure and turnover, VaR-based margining, client-level gross margining, on-line position monitoring, business continuity plans, and the like
Derivatives trading	Absent	A wide array of exchange-traded derivatives, such as futures and options on indexes and single stocks and futures on interest rates (available since 2000–01 and ongoing), commodities (since 2003), and currencies (since 2008)
Research	Very little	Many market participants have full-fledged research departments. Some of them have schemes and initiatives to promote research

Source: Author

Notes: ADRs, American depository receipts; CISs, collective investment schemes; ECBs, external commercial borrowings; GDRs, global depository receipts; MFs, mutual funds; SEBI, Securities and Exchange Board of India; SROs, self-regulatory organizations; VaR, value at risk.

3.2.1 Equity Markets

Though India has, in the Bombay Stock Exchange (BSE), one of the oldest stock exchanges in Asia and the world, the country's modern securities market history really starts only in the 1990s. In this period, starting in the mid-1990s, the Indian securities market has many "firsts" to its credit. It established one of the first demutualized stock exchanges in the world. All

stock exchanges in India today are corporatized and demutualized. The Indian securities market was the first to use satellite-based communication technology for securities transactions. It was the first to introduce straight through processing in securities transactions. The growing number of market participants; the growth in volumes in securities transactions; the reduction in transaction costs; the significant improvements in efficiency, transparency, and safety; and the level of compliance with international standards have earned for the Indian securities market a new respect among the securities markets in the world.

In addition to these developments, thanks to the massive liberalization ushered in 1992, the securities market in India has grown exponentially as measured in terms of the amount raised from the market, number of market participants, number of listed stocks, market capitalization, trading volumes and turnover on stock exchanges, and investor population. Table 4 presents some statistics pertaining to the securities markets in India.

Table 4: Profile of Indian Securities Markets, 2000–09[a]
Millions of US dollars, unless otherwise indicated

Description	2000–01	2007–08	2008–09
Amount raised by government	27,548	55,763	46,093
Amount raised domestically by corporate sector	15,909	58,383	25,859
Amount raised through euro issues	900	6,644	940
Amount raised by mutual funds	2,387	38,479	-5554
Assets under management of mutual funds at the end of year	19,423	126,383	81,904
Market capitalization at the end of year	164,851	1,286,307	607,061
Turnover in cash segment	617,708	1,283,667	756,054
Impact cost (for a trade of Rs 0.5 crore at NSE), in %[b]	0.28	0.09	0.08
Trading costs, in basis points	114	53	56
Net cumulative investment by FIIs at the end of year, in billions of U.S. dollars[c]	13.4	68	56.7
Millions of investor accounts with depositories at the end of year	3.8	14.2	15.2

Sources: RBI, Securities and Exchange Board of India, and the National Stock Exchange of India (NSE).

Notes: a) All conversions from Indian rupee (Rs) to US dollars for a particular fiscal year are made at the exchange rate prevailing on March 31 of that fiscal year; b) A “crore” is an Indian unit equaling 10 million; c) FIIs, foreign institutional investors.

According to the 2009 *Global Stock Markets Factbook*, India ranked thirteenth in the world in terms of total market capitalization (US$645 billion) and total value traded (US$1,050 billion) in 2008.[13] It ranked second in terms of the number of listed companies, exceeded only by United States. However, India is still far behind PRC in terms of market capitalization and turnover, while it scores well above the other EMEs on these equity market indicators.

3.2.2 Equity Derivatives Markets

India’s tryst with exchange-traded equity derivatives began only in this century. Trading first commenced in index futures contracts, followed by index options in June 2001, individual stocks options in July 2001, and single stocks futures in November 2001. Since then, equity derivatives have come a long way. An expanding list of eligible investors, rising volumes, and the best of risk management framework for exchange-traded derivatives have been the hallmarks of the history of equity derivatives in India so far.

[13] Standard and Poor’s (2009).

India's experience with the launch of the equity derivatives market has been extremely positive. The derivatives turnover on the National Stock Exchange of India (NSE) has surpassed the equity market turnover within four years of the introduction of derivatives.[14] The turnover of derivatives (on the NSE and BSE) increased from Rs 40,380 million (US$0.87 billion) in 2000–01 to Rs 110,227,482 million (US$2,163 billion) in 2008–09 (table 5).

Table 5: Growth in Derivative Markets, 2000–09
Units as indicated

Year	No. of contracts traded	Turnover (Rs millions)	Open interest (Rs millions)	Turnover (US$ millions)
2000–01	168,323	40,380	n.a.	866
2003–04	57,269,034	21,431,012	71,891	493,916
2006–07	218,428,742	74,152,774	386,830	1,701,142
2008–09	657,906,085	110,227,482	577,050	2,163,444

Source: Securities and Exchange Board of India

In terms of the number of single stock futures contracts traded in 2008, the NSE held the second position in the world in 2008; it was fourth in the number of stock index options contracts traded and third in the number of stock index futures contracts.[15] In terms of traded volumes in futures and options taken together, the NSE has been improving its worldwide ranking from fifteenth in 2006 to ninth in 2007 and eighth in 2008.[16] The traded volumes in the derivatives segment of the NSE in 2008 represented an increase of 55.4% over the figure for 2007.

Thus India is one of the most successful developing countries in terms of a vibrant market for exchange-traded equity derivatives. However, on the general issue of risk mitigation products (of which equity derivatives are just one example), it is poignant to note that "innovations" have appeared in the country only after years of toil and waiting. Stock index futures took five years to be offered to the investors, from the time they were conceived. Exchange-traded fund for gold again took four years to become a reality. Interest rate derivatives, though launched in 2003, did not take off mainly due to constraints on the participation of banks in this market and had to be relaunched in 2009. These experiences highlight the adverse environment for financial innovation in the country.

Another issue that deserves attention for further development of these markets is the explicit segmentation of markets within exchanges. As an example, the equity spot market is one "segment," and the equity derivatives market is another segment. The currency derivatives market is yet another segment. Financial firms have to obtain separate memberships in each segment and suffer from a duplication of compliance costs. This separation also reduces the ability of a clearing corporation to know the full position of a financial firm or its customers, and the risk that the firm poses to the system.

3.3 Debt Markets

The following analysis evaluates the performance of three components of the debt market: money markets, government securities markets, and corporate debt markets.

[14] The NSE is a premier stock exchange of the country, accounting for 99 % of trading in the derivatives segment.

[15] These rankings are based on World Federation of Exchanges (2008).

[16] Futures Industry Association (2009).

3.3.1 Money Markets

Table 6 shows the development of money markets in India in 1992 and 2009.

Table 6: Developments in Money Markets, 1992 versus 2009

Features	1992	2009
Pure interbank call money market	Absent	Call market transactions limited to banks and primary dealers only in the interest of financial stability, leading to development of pure interbank call money market
Uncollateralized call money segment versus collateralized market	Call money market largely uncollateralized	Shift of activity from uncollateralized to collateralized segments of the market
Repo market	Limited participants	Nonbanking financial companies, mutual funds, housing finance companies, and insurance companies not holding subsidiary general ledger accounts permitted to undertake repo transactions as of March 3, 2003 Subsequently, nonscheduled urban cooperative banks and listed companies having gilt accounts with scheduled commercial banks are allowed to participate in repo markets
Central counterparty	Nonexistent	Clearing Corporation of India set up as a central counterparty for all trades involving foreign exchange; government securities and other debt instruments routed through it

Source: Author

In comparison with the early 1990s, money markets are currently better in terms of depth, and as a result of various policy initiatives, activity in all the segments has increased significantly, especially during the last three years (table 7). With the development of market repo and collateralized borrowing and lending obligation segments, the call money market has been transformed into a pure interbank market since August 2005. In the interest of financial stability, the uncollateralized overnight transactions are now limited to banks and primary dealers.

Table 7: Activity in the Money Market Segment, 2001–07[a]

Millions of U.S. dollars Year	Average daily turnover[b]					Outstanding amounts	
	Call money market	Market repo (outside the LAF)[c]	CBLO	Term money market	Money market,total	Commercial paper	Certificates of deposit
2001–02	7,202	6,181	n.a.	40	13,422	1,624	194
2005–06	4,030	4,748	4,492	187	13,458	3,875	6,119
2006–07	4,984	7,726	7,431	232	20,372	4,927	14,901

Source: RBI.

Notes: a) All conversions from Indian rupees to U.S. dollars for a particular fiscal year are made at the exchange rate prevailing on March 31 of that fiscal year; b) Turnover is twice the single leg volumes in the case of call money and CBLO (collateralized borrowing and lending obligation) to capture borrowing and lending both, and four times in case of market repo to capture the borrowing and lending in the two legs of a repo; c) LAF, liquidity adjustment facility.

Volatility in call rates has declined over the years, especially after the introduction of the liquidity adjustment facility. There also has been a reduction in bid-ask spread in the overnight rates, which indicates that the Indian money market has become reasonably deep, vibrant, and liquid.

However, though the money market is free from interest rate ceilings, structural barriers and institutional factors continue to create distortions in the market. Apart from the overnight interbank (call market) rate, the other interest rates in the money market are sticky and appear to be set in customer markets rather than auction markets. A well-defined yield curve does not therefore exist in the Indian money market.

3.3.2 Government Securities Markets

Table 8 illustrates how the government securities market has changed from 1992 to 2009.

Table 8: Developments in Government Securities Markets, 1992 versus 2009

Features	1992	2009
Securities	"Plain vanilla" cash flow securities	Expanded to include zero coupon bonds, floating rate bonds, capital indexed bonds, bonds with embedded derivatives, interest rate futures
Form of securities	Physical	"Demat" holding by RBI-regulated entities
Pricing of securities	Administered interest rates	Issue at market-related rates (auction)
Participation	Captive investors (mostly banks)	Expanded to allow primary dealers, FIIs, retail investors
Trading mechanism	Through telephone	NDS, which provides negotiation and screen-based trading
Counterparty risk	Present	Clearing Corporation of India provides novation and guarantees settlement
Technological infrastructure	Weak	A screen-based anonymous trading and reporting platform introduced in the form of NDS-OM, which enables electronic bidding in primary auctions and disseminates trading information with a minimum time lag
Depth and liquidity	Limited	Number of measures taken to promote liquidity, such as introduction of "when issued" trading, "short selling" of government securities and active consolidation of government debt through buy backs.

Source: Author

Notes: Demat, dematerialized account; NDS, negotiated dealing system; OM, order matching segment.

As a result of the developmental measures undertaken, the volume of transactions in government securities has increased manyfold over the past decade (table 9). The investor base, which was largely determined by mandated investment requirements before reforms, has expanded slightly with the voluntary holding of government securities. Accordingly, the share of commercial banks in holding of government securities has declined from about 41.5% in 2007 to 38.8% in 2009.[17]

Table 9: Secondary Market Transactions in Government Securities, 2000–08
Millions of US dollars

Year	Turnover
2000	129,093
2005	571,770
2008	1,237,993

Source: RBI.

Note: All conversions from Indian rupees to U.S. dollars for a particular calendar year are made at the exchange rate prevailing on December 31 of that year.

[17] Figures are from the monthly bulletins of the RBI.

However, a number of problems continue to confront these markets. A benchmark yield curve for government securities has not yet emerged. Liquidity of the markets is poor, which impedes the development of a yield curve that can be reliably used to price all cash flows off the curve. Only a handful of securities account for the bulk of trading. There are isolated pockets of liquidity for very short term and very long term securities. In addition, there are limits on foreign institutional investor (FII) investments in government securities (at this writing, US$5 billion), which limit voluntary demand for them from abroad.

A key issue for government securities markets is that the central bank is also the manager of public debt in the country, which leads to a series of conflicts. There is, to begin with, a conflict of interest between setting the short-term interest rate and selling bonds for the government. Furthermore, since the central bank administers the operational systems for these markets, it follows that the owner-administrator of these systems is also a participant in the market. In effect, the government securities market is a captive market, with the RBI mandating that banks hold a large amount of government bonds; this undermines the growth of a deep, liquid market in government securities with vibrant trading and speculative price discovery. In turn, this hampers the development of the corporate bond market as there a benchmark sovereign yield curve is lacking, making it difficult to price corporate bonds.

3.3.3 Corporate Debt Markets

Table 10 shows the change in corporate debt markets in India from 1992 to 2009.

Table 10: Developments in Corporate Debt Markets, 1992 versus 2009

Features	1992	2009
Issue procedures	Cumbersome	Simplified issue procedures put in place through regulations. Issuers required to make only some incremental disclosures every time they approach the market with a fresh issue either to the public or through a private placement
Centralized database	Nonexistent	Database for new bond issuances operationalized
Retail participation	Limited mainly due to high minimum lot size of Rs 1 million	The minimum market lot reduced to Rs 100,000 to enable better access to smaller investors
Exchange-traded interest rate derivatives	Not available	Exchange-traded interest rate derivatives launched in 2003 and relaunched with certain changes in 2009
Trade reporting platform	Absent	Trade reporting platform operationalized
Dematerialization	Absent	Compulsory dematerialization in settlement from 2003
Settlement	Arranged by counterparties	Settlement through an exchange platform (from 2009)

Source: Author

Private bond market capitalization as percentage of GDP was 0.4% for India in 2001, increasing to 2.67% in 2007. The public bond market capitalization as percentage of GDP was 30 % and 3% for these years, respectively. These figures indicate underdeveloped bond markets when compared to other emerging markets with similar financial sector depth. A comparison of the size and composition of the domestic debt market in India with select emerging market countries puts India at the bottom in terms of private bond market capitalization as a percentage of GDP and ahead of South Africa and PRC in terms of public

bond market capitalization as a percentage of GDP (table 11). In India financial institutions and government or government-guaranteed instruments dominate most of the issuance in the corporate bond market, with a share of 8% and 90% of the total issuance as of the end of March 2009, respectively. The share of corporate issuers in the total bond issuance is very low at only 2%.

Table 11: Private and Public Domestic Bond Market Capitalization as a Share of GDP, Various Countries, 2007
%

Country	Private bond market capitalization[a]	Public bond market capitalization[b]
Emerging markets		
India	2.67	30.97
Republic of Korea	58.81	48.11
South Africa	15.96	25.77
People's Republic of China	24.46	28.13
Thailand	16	34.72
Russia	2.87	99.62
Brazil	16.92	46.13
Developed markets		
United States	125.10	46.77
United Kingdom	15.84	32.09
Japan	38.79	159.91

Source: World Bank Financial Structure database, updated on May 2009 (http://go.worldbank.org/X23UD9QUX0).

Notes: a) Private domestic debt securities are outstanding securities issued by financial institutions and corporations, as a share of GDP; b) Public domestic debt securities are outstanding securities issued by government, as a share of GDP.

A well-developed corporate bond market is essential for financial system efficiency, stability, and overall economic growth. A well-functioning bond market provides for financial diversification and facilitates necessary financing for corporations and infrastructure development. However, as noted above, this market remains practically nonexistent in India, imposing an avoidable constraint on India's ability to finance its growing needs for debt, particularly for infrastructure development. Most of the large issuers are quasi-governmental, including banks, public sector oil companies, or government-sponsored financial institutions. Of the rest, a few known names dominate. There is very little high-yield issuance, and spreads between sovereign debt, AAA debt, and high-yield debt are high in comparison to other markets. Very few papers trade on a regular basis. Trading in most papers dries up after the first few days of issuance, during which the larger players "retail" the bonds they have picked up to smaller pension funds and cooperative banks. Most trading is between banks and the mutual fund companies.

The lack of depth in the government bond market and the absence of a yield curve for government bonds, which could serve as a benchmark for corporate bonds; a cumbersome primary issuance mechanism (to some extent addressed by recent changes in the regulations by the market regulator, the Securities and Exchange Board of India); the absence of sufficiently diversified long-term investors; and chronic illiquidity caused inter alia by absence of derivative instruments are some of the factors leading to underdeveloped bond markets. There are also limits on FII investments in corporate debt (US$15 billion at this writing), which are reviewed periodically.

3.4 Foreign Exchange Markets

Table 12 compares the state of foreign exchange markets in India in 1992 and 2009.

Table 12: Developments in Foreign Exchange Markets, 1992 versus 2009

Features	1992	2009
Exchange rate regime	Single currency fixed exchange rate system	Valuation of rupee against a basket of currencies and a market-determined floating exchange rate regime
Convertibility of rupee	Not convertible	Full convertibility of rupee for current account transactions De facto full capital account convertibility for nonresidents, and calibrated liberalization of transactions undertaken for capital account purposes in the case of residents
Regulatory framework	Restrictive Foreign Exchange Regulation Act (FERA), 1973	FERA replaced with relatively more market friendly Foreign Exchange Management Act, 1999
Instruments in foreign exchange markets	Limited	New instruments permitted, such as rupee-foreign currency swap, foreign currency-rupee options, cross-currency options, interest rate swaps, and forward rate agreements
Market participants and regulations	Limitations on participation	Authorized dealers permitted to initiate trading positions, borrow, and invest in overseas market Banks permitted to fix interest rates on nonresident deposits, use derivative products for asset-liability management, and fix overnight open position limits and gap limits in the foreign exchange market Permission given to various participants in the foreign exchange market—including exporters, Indians investing abroad, FIIs—to use forward cover and enter into swap transactions without any limit, subject to genuine underlying exposure FIIs and nonresident Indians permitted to trade in equity derivative contracts on exchanges, subject to certain conditions Foreign exchange earners permitted to maintain foreign currency accounts; residents permitted to open such accounts within the general limit of US$25,000 a year

Source: Author

Reforms in foreign exchange markets have been focused on market development with built-in prudential safeguards so that the market would not be destabilized in the process. The most important measures undertaken to reform these markets were the move toward a market-based exchange rate regime in 1993 and the subsequent adoption of current account convertibility. Allowing greater autonomy for banks in their foreign exchange operations, admitting new players into the markets, and permitting limited introduction of new products have been other important reforms.

As a result of various measures, the annual turnover in the foreign exchange market increased more than eightfold, from US$1,305 billion in 1997–98 to US$12,092 billion in 2008–09. During this period, there has been a steady but slow fall in the share of spot transactions in total turnover in the foreign exchange markets, implying an increase in gross turnover in the over-the-counter (OTC) derivatives (swaps and forwards) segment of currency markets. Activity in this segment has picked up, particularly in late 2007 and through 2008, following increased volatility in the U.S. dollar–rupee exchange rate. The

average daily turnover, calculated on a monthly basis, reached an all-time high of US$35 billion in September 2008. The year 2008 closed with average daily volumes of US$28.63 billion in these markets over the full year.

While OTC foreign exchange markets are doing well in India, the exchange-traded currency futures market has been introduced only in August 2008. This market, as it exists today, is limited exclusively to rupee–U.S. dollar contracts, with very low position limits and a ban on trading by nonresidents, including FIIs. Despite these restrictions, the currency futures market has seen a steady growth in liquidity and now matches the spreads that are seen on their much longer-lived OTC forwards counterparts. There is considerable scope for further development of these markets by removing the aforementioned restrictions.

3.5 Banking Sector

Table 13 lists the developments in the banking sector from 1992 to 2009.

Table 13: Developments in the Banking Sector, 1992 versus 2009[a]

Features	1992	2009
Competition	Limited; predominantly government owned	Increased competition with entry of foreign and new private banks; reduction of public ownership in public sector banks by allowing them to raise capital from equity market up to 49% of paid-up capital
Interest rate structure	Administered interest rates	Interest rates largely deregulated with a few exceptions
Statutory pre-emption	High level of statutory preemption in the form of cash reserve ratio (CRR) and statutory liquidity ratio (SLR) requirements	Gradual reduction of CRR and SLR requirements
Diversification of activities	Limited	Banks allowed to diversify into nontraditional activities
Regulatory oversight	Strict oversight by RBI, including in day-to-day functioning	Greater functional autonomy and operational flexibility in day-to-day activities Risk-based supervision introduced Introduction of CAMELS supervisory rating system Streamlining of the supervision process with combination of on-site and off-site surveillance along with external auditing Introduction of the process of structured and discretionary intervention for problem banks through a prompt corrective action mechanism Establishment of the Board for Financial Supervision as the apex supervisory authority for commercial banks, financial institutions, and nonbanking financial companies
Products	Limited	New products and delivery channels introduced
Debt recovery process	Prolonged and tedious	*Lok adalats* (people's courts), debt recovery tribunals, asset reconstruction companies, settlement advisory committees, corporate debt restructuring mechanism, set up for quicker recovery and restructuring
Markets for securitized assets	Underdeveloped	Promulgation of the Securitization and Reconstruction of Financial Assets and Enforcement of Securities Interest Act, 2002, and its subsequent amendment to ensure creditor rights

Source: Author

The reforms mentioned above have had major impact on the overall efficiency and stability of the banking system in India. A select few reforms, which are critical, affect:

i. *Capital*: The average capital to risk (weighted) assets ratio (CRAR) of all banks increased from 9.2% as of March 31, 1994, to 13.2% as of March 31, 2009. With the global range for CRAR being 10.2% to 13.2%, the capital adequacy of Indian banks is comparable to those at the international level.

ii. *Asset quality*: The RBI introduced an objective criterion for identifying nonperforming assets (NPAs) in 1992–93. While gross NPAs, as a proportion of gross advances, have been declining steadily and distinctly over the years, the level of gross NPAs in absolute terms has also decreased over the recent past. The ratio of gross NPAs to gross advances for the banking system was 14.4% in March 1998 but decreased to 2.33% in March 2009. During the same period, the

ratio of net NPAs to net advances declined from 7.3% to 1.0%. The ratio of nonperforming loans to total loans was 2.3% in 2008 for India, lower than for most of the other EMEs.

iii. *Profitability:* The reform measures have also resulted in an improvement in the profitability of banks. The return on assets of all banks in India rose from 0.4% in the year 1991–92 to 1.0% in 2008. The return on assets of Indian banks is in the range 0.1% to 2.1%, which is comparable to the levels in other EMEs.

These profitability figures mask an important fact that India is hugely underbanked. India's poor, many of whom work as agricultural and unskilled or semiskilled wage laborers, microentrepreneurs, and low-salaried workers, are largely excluded from the formal financial system. Over 40% of India's working population earn but have no savings. The population served per bank branch in rural India is approximately 18,000 while in urban India it is 5,000.[18]

3.6 Insurance Sector

Table 14 compares the development in the insurance sector in 1992 and 2009.

Table 14: Developments in the Insurance Sector, 1992 versus 2009

Features	1992	2009
Regulator	No specific regulator, but central government oversight	A specialized regulator for insurance sector (IRDA) was constituted in 1999 to protect the interests of insurance policyholders and to regulate, promote, and ensure orderly growth of the insurance industry.
Products	Limited number of products available	New insurance products have been introduced, such as weather insurance, group health insurance for the poor, product liability insurance, life insurance with critical and terminal illness riders, and package insurance for small and medium enterprises.
Market structure	State-owned monopoly: only nationalized insurance companies allowed Only six insurance companies operating	Private insurance companies were allowed back into the business of insurance with a maximum of 26% of foreign holding in 1999. Number of insurers stands at 44 as of end of March 2009.
Regulatory approach	Merit-based regulation	Disclosure-based regulation

Source: Author

Note: IRDA, Insurance Regulatory and Development Authority.

The life insurance business (measured in the context of first-year premium) registered a year-on-year growth of 94.96% in 2006–07 and 23.88% in 2007–08. The general insurance business (gross direct premium) registered a growth of 11.72% in 2007–08 (versus 3.52% achieved in 2006–07). This has resulted in increasing insurance penetration in the country. Insurance penetration for the year 2007 stood at 4% for life insurance and 0.6% for nonlife insurance.[19] The growth in the insurance industry has been spurred by product innovation, active distribution channels coupled with targeted publicity, and promotional campaigns by the insurers.

[18] Committee on Financial Sector Reforms (Planning Commission 2009).

[19] Premium volume as a ratio of GDP. See Insurance Regulatory and Development Authority (2008).

When India's insurance industry performance is compared with that of other emerging markets, it apparent that Indian markets have the lowest insurance density.[20] However, in terms of insurance penetration, India fares better than most emerging markets. The participation of low-income groups in life insurance, the second most preferred savings instrument after bank savings deposits, is still very limited. One-third of all paid workers have some life insurance protection. However, only 14% of people in the lowest income quartile and 26% in the second quartile have life insurance, compared to 69% of those in the highest income quartile. While the elaborate sales and distribution model has contributed to the popularity of life insurance, this has come at considerable cost by way of high commissions and a high percentage of lapsed policies.[21] Policy lapses are low only in the highest income quartile, while in all other segments, at least 20% of respondents have had a policy lapse. The penetration of nonlife insurance products is negligible. For example, only 1% of the population appears to have medical insurance.[22]

The insurance industry also continues to face some basic problems. One of these is that a large part of the sale of "insurance" products is merely tax arbitrage, where a fund management product is given preferential tax treatment under the garb of a minimal insurance cover. A related issue is that much of the growth in insurance penetration is as a result of selling of products such as unit linked insurance plans (ULIPs), which are essentially a mutual fund type of securities market product. The relatively better performance of ULIPs could be attributed, inter alia, to higher commissions for insurance ULIPs than for mutual fund products. Thus there is a blurring of products wherein financial instruments are partaking of the multiple characteristics of investment, pensions, and insurance. Some basic changes in regulatory architecture would be necessary to address this, a topic revisited later in the chapter.

4. AN ASSESSMENT OF INDIAN FINANCIAL SECTOR REFORMS AND THE WAY AHEAD

Looking both at the story of growth and development of each of the segments of financial markets in India described in above and the more numbers-based evidence in the first section, one cannot escape the fact that they point to two contradictory developments; the dramatic transformation of the stock market segment but the considerably more limited progress in other segments of the markets. In other words, one could broadly say that while India has done well in terms of creating efficient equity and equity derivatives, development in the banking sector services, bond markets, retail access to finance, and general business environment leaves much to be desired.

[20] Ratio of premium (in U.S. dollars) to total population.

[21] For traditional life insurance products, a policyholder typically loses the entire investment if the policy lapses within the first three years. After that, only the surrender value is paid in the case of a lapse, which is less than 35 % of the total premiums paid. The Insurance Regulatory and Development Authority reported that almost 5 % of life insurance policies lapsed between 2000 and 2005. This number was as high as 16 % among private providers due to the higher contribution of unit linked insurance plans and aggressive selling policies. See ISEC Securities (2007, p. 43).

[22] Planning Commission (2009, pp. 53–54).

The recently submitted report of the Government of India's Committee on Financial Sector Reforms (CFSR) summarizes the state of various segments of Indian financial markets in terms of immediacy, depth, and resilience (see table 15).[23]

Table 15: Liquidity of Indian Financial Markets

Market	Immediacy	Depth	Resilience
Large cap stocks and futures, and index futures	Y	Y	Y
Other stocks			
On-the-run government bonds	Y	Y	
Other government bonds			
Corporate bonds			
Commercial paper and other money market instruments			
Near-money options on index and liquid stocks	Y		
Other stock options			
Currency	Y		
Interest rate swaps	Y	Y	
Metals, energies, and select agricultural commodity futures	Y		
Other commodity futures			

Source: CFSR (Planning Commission 2009).

In the view of the CFSR, resilience is found in the large stocks, their stock futures and the index futures. All other markets in India lack resilience. Depth is found, in addition, with on-the-run government bonds and interest rate swaps. Immediacy is found in a few more markets. A well-functioning market is one that has all three elements. India has only one market where this has been achieved, for roughly the top 200 stocks, their derivatives, and index derivatives.

The CFSR further notes that when a financial market does not exist, or is inadequately liquid to meet the requirements at hand, or suffers from deviations from fair price, this constitutes market incompleteness. Economic agents are unable to enter into transactions that they require for conducting their optimal plans. Market incompleteness has many destructive implications for resource allocation and ultimately GDP growth.

It is pertinent to try to look for answers to this differential and dualistic development of the Indian financial sector by understanding what was done right in reforms in the stock markets and what went wrong or was not done in other areas of finance. This will then be useful in charting out a road map for next-generation financial sector reforms in the country.

[23] Planning Commission (2009). Immediacy refers to the ability to execute trades of small size immediately without moving the price adversely (in the jargon, at low-impact cost). Depth refers to the impact cost suffered when doing large trades. Resilience refers to the speed with which prices and liquidity of the market revert back to normal conditions after a large trade has taken place.

4.1 Diagnosis

The extent and pace of reforms in a segment of financial markets in India appear to be shaped by two factors: a clearly defined regulatory framework and the extent of public sector presence. The debt markets in India illustrate this. The debt market has had a strong public sector presence. The dominant traded instruments are Government of India securities, and the dominant trading participants are banks, with a large fraction being the public sector banks. When the Securities and Exchange Board of India (SEBI) was created to regulate "securities markets," the markets for bonds did not fall within its mandate due to confusion in the financial architecture prevalent in the country. Despite the fact that the legal definition of the word securities included "bonds," due to a variety of reasons, including the fact that RBI was the investment banker to the Government of India and the regulator of the banking sector (which is the dominant player in the bond market), SEBI did not become the sole regulator for the bond market. Even now there is legal confusion over who regulates the government securities market, with the RBI exercising a lot of regulatory powers. Thus the bond market did not benefit from an independent regulator, as the equity markets did. The approach of reforms in equity markets was through an independent regulator, the SEBI. However, the development of bond markets took place in the context of this conflict of jurisdiction. There were considerable lags in institutional development in the Indian debt markets as compared to equity and commodities markets, as demonstrated in table 16.

Table 16: Lags in Institutional Development in the Indian Debt Market

Institution	Original development	Adoption for debt market
Electronic trading on a single platform	Equity, 1994; commodity futures, 2004	2005, eleven years later
National access to trading	Equity, 1994; commodity futures, 2004	Absent
Clearing corporation	Equity, 1996	1999, three years later
Independent regulator	Equity, 1992; insurance, 1999	Not yet even considered
Competition between exchanges	Equity, 1994; commodities, 2004	Absent
Entry barriers	Removed for equity, 1994; commodities, 2004	Barriers present

Source: Thomas (2006).

Similarly, as regards the impact of public sector presence on the pace and direction of reforms, one finds that in India, the pace of reforms has been the slowest where the government had a dominant presence. For example, the government dominated the insurance and banking sector, where the pace of the reforms has been the slowest. The government had a lower involvement in commodity markets, and the least in the case of equity, where reforms have made huge strides in institutional development and change.

Some of the other reasons for the varying pace of development in different sectors of the financial markets are bans or restrictions on products and participants. A policy environment that bans products and markets clearly hinders the development of liquid and efficient markets. As an example, exchange-traded currency futures were banned until August 2008, and commodity options are currently banned, obviously impeding the development of liquidity and efficiency in these markets. Equally problematic, a missing market can hamper the efficiency of other markets as well. For example, an efficient and deep corporate bond market is still lacking in India, inter alia, because the related markets for corporate repos, interest rate derivatives, and credit derivatives are either altogether missing or have only been allowed with multiple restrictions, which lead to stunted development.

In many cases, while an outright product ban is not in place, there are restrictions on participation. These include regulatory restrictions on some kinds of activities (for example, banks are prohibited from adopting long positions on interest rate futures) or quantitative restrictions (for example, all FIIs combined are required to keep their aggregate ownership of corporate bonds below US$15 billion).

The equity market—the only element of Indian finance that has achieved immediacy, depth, and resilience—has few restrictions on participation in both spot and derivatives markets. As a consequence, the equity market, especially for large stocks, has developed a distribution capability that reaches millions of market participants, including many around the world. All kinds of economic agents come together into a unified market to make the price. Competitive conditions hold for the most part as no one player is large enough to distort the price. The diverse views and needs of a range of participants impart resilience, depth, and market efficiency. Competition between the NSE and BSE has helped improve technology and reduce costs. The most important feature of the equity market has been free entry and exit for financial firms that become members of the NSE and BSE, and the free entry and exit for the economic agents who trade on these markets through exchange members. Such an open environment is critically important for achieving liquidity and efficiency in all the other elements of Indian financial markets.

In a growing and increasingly complex market-oriented economy such as India's, which is experiencing increased integration with global trade and finance, the financial system would be an important element in the country's future growth trajectory. Further steps are required to make the financial markets deeper, more efficient, and well-regulated. In this regard, two recent important government committees, the High-Powered Expert Committee on Making Mumbai an International Financial Center (HPEC on MIFC) and the CFSR, have charted out the road ahead for India's financial system to prepare it for the challenges of the future. Despite differences in their scope and terms of reference, the two committee reports have a common underlying term of reference, namely, to recommend the next generation of financial sector reforms for India. They both emphasize that recognizing the deep linkages among different reforms, including broader reforms to monetary and fiscal policies, are essential to achieve real progress.[24] The reports outline the key elements of a financial system that India will need in its quest for higher growth over the next few years.

4.2 Way Ahead

Drawing from various expert committee reports, mentioned above, certain policy actions are recommended below for further development of financial markets in India.

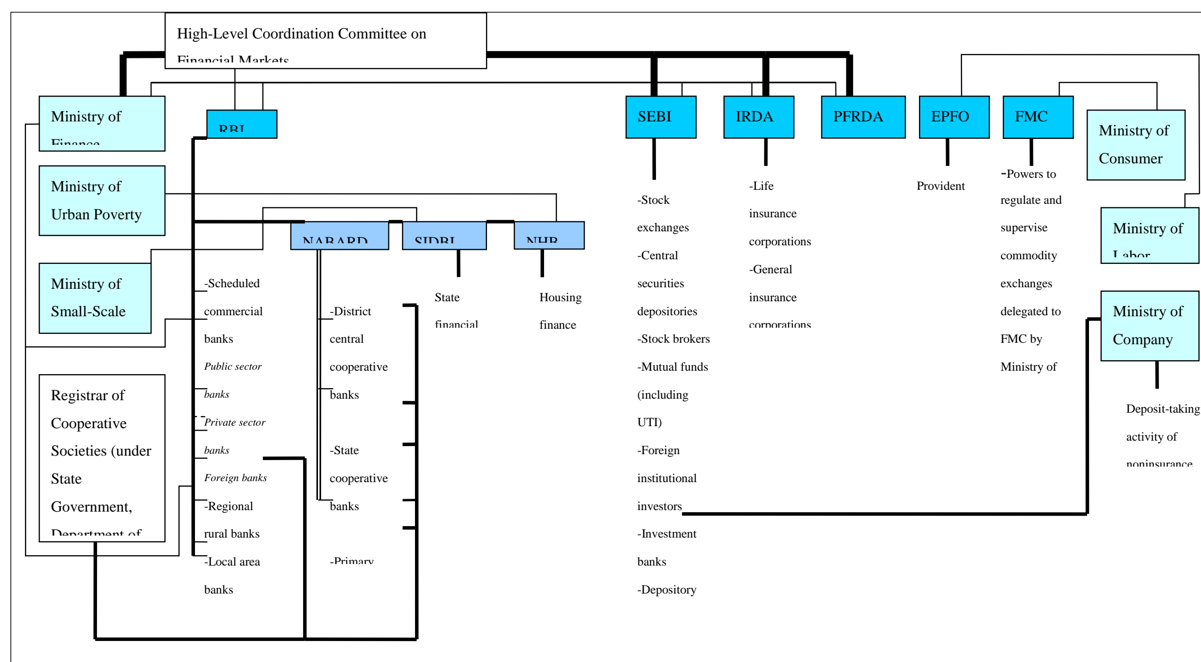
4.2.1 Regulatory Architecture

As shown in Figure 1, based on a report by the World Bank quoted in the CFSR, the current system involves half a dozen apex regulatory agencies, apart from several ministries in the government that retain direct regulatory powers. This structure leads to major regulatory overlaps and regulatory gaps. Sometimes this structure also can lead to regulatory arbitrage as similar financial services may be offered by institutions that come under different regulators and are therefore subject to different regulatory requirements. The overlapping regulatory structure also becomes a barrier to innovation as any new product might need approval from more than one regulator. In some cases, it is not even clear which regulator has primary jurisdiction over the product. In addition, multiplicity of regulators creates severe problems with interagency coordination. In India these coordination mechanisms are not formalized, and though these mechanisms can be [effective in emergencies, they are not

[24] See Planning Commission (2009) and HPEC on MIFC (Ministry of Finance 2007).

quite as effective at other times. Coordination problems are aggravated by the uneven skills and experience across regulators.

Figure 1: Current Regulatory Architecture[a]



Central government ministry

Tier 1 regulatory agencies each established through acts of parliament

Second tier regulatory supervisory agencies, each established through acts of parliament. These institutions perform refinancing functions.

Implicit role as MoF representatives are on the boards of SEBI, IRDA, RBI. Representatives of the MoF and MoSSI are also on the board of SIDBI, and representatives of the MoUD are on the board of NHB. The MoF is also represented on the boards of public sector banks, public sector development financial institutions, and life insurance and general insurance corporations.

Explicit regulation and supervision

Members of the High-Level Coordination Committee on Financial Markets

Supervision but no regulatory role

Source: CFSR (Planning Commission 2009), from a report by the World Bank (2005).

a. Acronyms: EFPO, Employees' Provident Fund Organization; FMC, Forward Markets Commission; IRDA, Insurance Regulatory and Development Authority; MoF, Ministry of Finance; MoSSI, Ministry of Small-Scale Industries; MoUD, Ministry of Urban Development; NABARD, National Bank for Agriculture and Rural Development; NBFCs, nonbank finance companies; NHB, National Housing Bank; PACARDBs, primary cooperative agriculture and rural development banks; PFRDA, Pension Fund Regulatory and Development Authority; RBI, Reserve Bank of India ; SCARDBs, state cooperative agriculture and rural development banks; SIDBI, Small Industries Development Bank of India; UTI, Unit Trust of India.

Regulatory structures need to be streamlined to avoid regulatory inconsistencies, gaps, overlap, and arbitrage. Steps in this direction should include a reduction in the number of regulators, defining their jurisdiction wherever possible in terms of functions rather than the forms of the players, and ensuring a level playing field by making all players performing a function report to the same regulator regardless of their size or ownership.

As also recommended by the HPEC on MIFC and the CFSR, there is merit in moving toward greater convergence of financial market regulation. The important gains achievable from this convergence are lower transaction costs due to economies of scale and scope, regulators

being less prone to capture, eliminating gaps and weaknesses in regulation, greater focus on financial inclusion and literacy efforts, seamless market development, and better risk management for systemic stability. Another important gain of regulatory convergence is that it would ensure equal regulatory treatment of financial entities (in terms of authorization, enforcement, or disciplinary decision) with similar risk characteristics, product lines, and operating in similar markets.

Options that can be explored to achieve greater regulatory convergence, based on recommendations of various government committees fall into two main categories.

The first category concerns *different degrees of convergence*. One option is convergence of the commodity derivatives and securities market, that is, one regulator for the equity, corporate debt, equity derivatives, and commodity derivatives markets. Another option is convergence of organized financial trading, that is, one regulator for the aforementioned commodity derivatives and securities market plus interest rate derivatives, foreign exchange derivatives, government securities, and all derivatives thereon. The third option would be convergence of all financial sector regulators, that is, one regulator for all of the above plus insurance and pensions, with the central bank retaining regulatory control over the banking sector.[25]

The second category concerns *policy level convergence*. This would mean that all financial sector regulation and regulators would be covered under a single legislative enactment and under a single department, even with multiple regulators.

Each of these alternatives needs to be explored.

Along with streamlining the regulatory framework, there is also a need to review the actual financial regulations, which tend to be “rule based” and overly prescriptive, inserting every minute detail into the basic legislation and including detailed subordinated rules and regulations. The suggestion here is to move toward more principles-based regulation to promote financial innovation and avoid the mistake of overregulation. However, even if the regulatory system continues to be rules based, then given the pace of financial innovation that a country that is growing as fast as India requires, there should definitely be a constant revisiting of the rules that are in place. Otherwise, system risks getting stuck in an old set of rules that will restrict the pace of growth in the country. Regulatory impact assessment could serve as an important tool for evaluating the costs and benefits of various aspects of the regulatory architecture and implementation to guard against the error of overregulation.

4.2.2 Financial Inclusion

A robust financial system is not as socially relevant if most people in the country do not have access to it. Financial inclusion is a key priority for India, especially rural India. The following are some recent initiatives for achieving greater financial inclusion:

i. The list of banking correspondents has been expanded to include individual petty, medical, and fair price shop owners and agents of small savings schemes of the Government of India, insurance companies, and retired teachers.

ii. Establishment of off-site ATMs has been delicensed.

iii. RBI is presently reviewing the priority sector lending guidelines and the feasibility of trading in priority sector lending certificates, as recommended by the CFSR.

[25] The CFSR as well as the HPEC on MIFC recommend unification of all regulatory and supervisory functions connected with organized financial trading into a single agency, that is, the SEBI. On the issue of regulation of the banking sector, the CFSR recommends that all banks and any other deposit-taking entities should come under one supervisor, the RBI.

iv. A proposal to grant a few more licenses to local area banks for a fixed period of time is also under consideration.

v. A working group of RBI has recommended removing the interest rate ceiling on loans up to Rs 200,000.

Financial sector policies in India have long been driven by the objective of increasing financial inclusion, but universal inclusion is still quite some distance away. The past strategy for expanding the reach of the financial system relied primarily on expanding branching, setting up special-purpose government-sponsored institutions, and setting targets for credit to broad categories of the excluded. The success of these approaches has been mixed. A new strategy for financial inclusion is needed that builds on the lessons of the past. It needs to be recognized that financial inclusion is not only about credit but also involves providing a wide range of financial services, including saving accounts, insurance, and remittance products. Efforts at financial inclusion need to move away from sectors to segments of people that are excluded. Past efforts have focused largely on agriculture. As the Indian economy diversifies and more people move away from farming, there is an urgent need to focus on other segments as well, for instance, the poor in urban areas. Product innovation, organizational flexibility, and superior cost efficiency are essential in reaching the excluded and offering them financial services that they will want to use. Competition and technology, as well as the use of low-cost, local organizations for outreach will have to play a much greater role in any such strategy.

4.2.3 Government Debt Management

As mentioned earlier, a key issue confronting the government securities markets is that the central bank is also the manager of public debt in the country, which leads to a series of conflicts. There is a strong international consensus that a well-run economy should have a dedicated, consolidated public debt manager and that the central bank should not, in general, perform this role. A number of expert committees have commented on the undesirability of burdening the RBI with the task of selling bonds for the government. Both the HPEC on MIFC and the CFSR emphasize the need for creation of an independent Indian "debt management office (DMO),"operating either as an autonomous agency or an office under the Ministry of Finance.[26] The separation of debt and monetary management would provide the central bank the necessary independence in monetary management, with neither the need to provide credit to the government nor the responsibility to ensure that government borrowings are incurred at low cost. A vibrant government securities market requires the professional capability of an independent DMO for engaging with the market, building a long-term relationship with investors, and obtaining money from the market at a good price. The objective of the independent DMO should be to minimize the medium- to long-term cost of the debt, with due regard for the risks in the debt portfolio, aside from promoting development of the domestic debt market. Thus a DMO would set the stage for modernization of the bond markets and establishing of the bond-currency-derivatives nexus, complementing the strategy for financial sector reforms in the country.

4.2.4 Framework for Institutional Investments

Various segments of the financial markets can develop and thrive only when participation in them is not artificially constrained. The most successful parts of Indian finance at present are those in which noninstitutional participants have taken a lead and engaged in speculative price discovery. This large mass of retail participation in financial markets is a unique edge that India has when compared with other international financial markets. However, considering that India is striving to develop Mumbai as an international financial center, the capabilities and strengths of institutional investors also need to be harnessed. This class of

[26] See Planning Commission (2009, pp. 38–42); Ministry of Finance (pp. 191–92).

investors brings with them sophisticated analytical tools in quantitative trading systems, pools of capital, and the potential to help link Indian finance with the rest of the world. Thus the strategy should be to remove the constraints on the institutional sector to allow them to reap the benefits of financial market innovations and in turn assist these markets with depth and liquidity. The regulators should move gradually to a "prudent man" principle where the institutional investor is allowed to exercise judgment based on what a prudent man might deem to be appropriate investments.

4.2.5 Competition

Lack of sufficient competition in parts of the financial services industry, the pervasiveness of public ownership, and overcompartmentalization of subsectors have resulted in suboptimal performance by existing market players. Competition needs to be across larger, more capable players rather than among a plethora of small, weak, undercapitalized players that cannot capture economies of scale or make the kinds of investments in people, training, technology, and research into product development that supports innovation. The Indian financial sector needs a wave of consolidation—through acquisitions and mergers among private and publicly owned institutions—for its financial firms to be strong enough to compete as aggressively as they should with each other, and with foreign firms, in Indian and global markets. A license to operate in a certain area of Indian finance is, all too often, a safe sinecure with stable profits and a near-zero probability of death. There is therefore little incentive to innovate to remain competitive. This is not unlike firms in the real economy before 1992. For a shift into a high-innovation regime, both carrot and stick are required. The stick would be the introduction of competition: entry barriers in domestic finance and protectionism need to be removed. The carrot would be the significantly reduced cost of innovation that would result from a different regulatory attitude and approach. In addition, a shift from a domestically focused to an internationally focused financial sector would induce the associated carrot of enormously larger market size.

4.2.6 Financial Stability

The CFSR has especially touched upon the goal of improving financial stability as an important reason for pursuing financial sector reforms. Financial stability is the key to sound functioning of the financial markets and the economy itself. By definition, this is a multiagency function. Though not explicitly located by law in any agency, the task of maintaining financial stability in India, at the moment, lies with the interregulatory body know as the HLCCFM (High-Level Coordination Committee on Financial Markets). It is chaired by the governor of the central bank and has members from other regulatory agencies. This committee has no legal backing and hence lacks powers of enforcement.

There is also a general feeling that more needs to be done on regulation and supervision of financial conglomerates. As was evident during the recent global crisis, any financial firm whose combination of size, leverage, and interconnectedness could pose a threat to financial stability, if it failed, should be subject to robust consolidated supervision and regulation. The CFSR report also notes that as financial conglomerates begin to dominate the system, a consolidated system of supervision becomes more important.[27]

All this points to the need for improved interregulatory coordination and for strengthening and consolidating regulatory structures to deal with large, complex, systemically important financial conglomerates, on the one hand, and with the needs of the consumer, on the other. It is important to examine practices that are evolving in other jurisdictions and formalize a structure for handling issues of financial stability.

[27] Planning Commission (2009, chap. 6).

4.2.7 Strengthening Interregulatory Coordination

The recent global financial crisis has drawn a lot of attention to the role of regulatory bodies. The countries of the Group of Twenty have increasingly been discussing the need for greater coordination not only between regulatory bodies but also between member countries and jurisdictions as well. India has recently become a member of the Financial Stability Board and is striving for the membership in the Financial Action Task Force. Response to these international bodies has to be timely and often requires inputs from regulators at very short notice. As India moves in the direction of carrying out a financial sector assessment program, as per the criteria specified by international standard-setting bodies, it is in the interest of all concerned that the present arrangements are fortified to cater to the upcoming requirements.

This point can be reiterated while looking at the issues of anti–money laundering and combating financing of terrorism (AML-CFT), which cut across the entire financial system and require a properly coordinated approach. For example, at present AML-CFT is handled by each regulator in its own way. There is a need to house the coordination of this program with an agency that can take a holistic view of the threats, vulnerabilities, and risks associated with AML-CFT, cutting across all institutions.

Similarly, issues such as financial literacy, regulation of financial and investment advisers, and reduction of products arbitrage (as in case of ULIPs and other mutual funds) also require a more formal structure of interregulatory coordination than the present one. The case of entities like credit rating agencies is particularly interesting as they are regulated by one agency (SEBI), but their ratings have an impact on the entities regulated by other regulatory bodies. Inadequate interregulatory coordination in this area may create disharmony in the system.

The HLCCFM was a good mechanism when it was set up. However, to keep pace with subsequent developments, it needs to evolve with the times in order to be more effective because the markets that are regulated by members of the HLCCFM have dramatically changed since 1992. It is generally agreed that over time, markets have become more complex and converged, and are becoming increasingly integrated. In the light of these trends, if regulators do not adopt an integrated and holistic view, supervision will be suboptimal. The aforementioned issues, namely, the requirement for more organized interregulatory coordination, furthering of the reforms agenda, and financial stability, draw attention to the need for strengthening the present interregulatory coordination mechanism. The CFSR has recommended setting up a financial sector oversight agency (FSOA) by statute to focus on macroprudential as well as supervisory issues in the financial markets; develop periodic assessments of macroeconomic risks and risk concentrations, as well as risk exposures in the economy; monitor the function of large, systemically important financial conglomerates as well as large systemically important financial institutions that would otherwise be unregulated; anticipate potential risks and initiate balanced supervisory action to support efforts by the concerned regulator to address those risks; and address and defuse interregulatory conflicts.[28] Thus the FSOA will take over the work now done by the HLCCFM, with the advantage that it would have legal backing and the support of a permanent secretariat. This recommendation is worth taking forward.

[28] Note that large, non-deposit-taking, nonbanking financial companies may borrow from both banks and mutual funds, and are properly an interregulatory concern, hence they would be under the purview of an FSOA.

5. CONCLUSION

Has the global financial crisis necessitated a change in India's approach and commitment to financial sector development on the lines of recommendations of certain recent government committees? I am of the opinion that it has not. As can be seen from the discussion in the section of this chapter, which traced the development of various segments of India's financial markets, the Indian approach to development of financial markets has focused on gradual, phased, and calibrated opening of the domestic financial and external sectors, taking into account reforms in other sectors of the economy. This continues to be the overall stand on reforms, even after the global crisis, though policies for the financial sector seem to be a little more cautious. However, given that a lot of the agenda of financial sector reforms in India has consisted of permitting formerly banned financial markets, strengthening regulation, plugging regulatory gaps, and strengthening regulatory coordination, recent global developments in no way have diluted this agenda.

An important issue that is being debated at various domestic and international forums following the crisis is the perils of OTC products. There is a move toward mandating a transparent trading framework for these products and more regulatory oversight. India has always favored exchange-traded financial products over OTC products due to the firm belief that OTC markets carry with them large and unknown counterparty credit risks, are not transparent, hinder competition, and, given all this, have systemic implications for financial stability.

Among the right lessons that can be drawn from the crisis are:

i. Innovation in financial markets should not be strangled. However, it should be ensured that the complexities of new products are understood, especially if they are traded off exchanges, as OTC products. When widely distributed and poorly understood, such products are dangerous to systemic stability.

ii. Too much risk aversion on part of regulators can impede growth and development.

iii. There is no perfect regulatory architecture, but institutional design needs to be in tune with markets and requirements.

Inclusion, growth, and stability are the three objectives of any reform process, and these objectives are contradictory. With the right reforms, the financial sector can be an enormous source of job creation both directly as well as indirectly, through the enterprise and consumption it can support with financing. Without reforms, however, the financial sector could become an increasing source of risk, as the mismatches between the capacity and needs of the real economy and the capabilities of the financial sector widen. India has been a case study of how financial sector reforms can play a supporting role in the growth of an emerging market economy. The challenge is how to bootstrap from these past successes to escalate to the next level of financial sector development, so that it can continue to support the growth that India faces going forward.

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