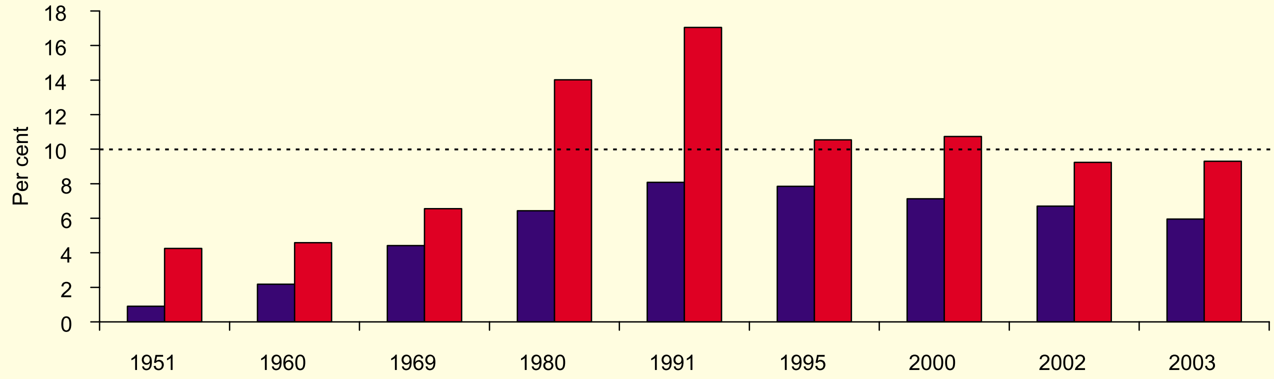
Chart 2: Cost of Deposits and Return on Loans of Commercial Banks: 1951-2003



Source : Reserve Bank of India (1978).
Report on Trend and Progress of Banking in India (various years).

are relatively bigger banks, it has resulted in a deterioration of the position of the cooperative banking segment as a whole. Movements in interest spread of cooperative banks indicate that in the recent past, there has been increase in competition faced by scheduled UCBs. With the phased deregulation of interest rates offered by these banks, there has been a marked fall in their spread. This, however, has not been witnessed in other segments of cooperatives. Similar decline in the operating expenses was also evidenced, driven primarily by a decline in their wage costs (Table 5).

Development Finance Institutions

Reflecting the changes in their operating environment, there has been a shift in the business profile of DFIs. A major change, which has taken place in the financing of investment activity by the DFIs, has been the growing importance of non-fund based business. The increased access to corporates in the international capital markets has affected DFIs foreign currency business. The share of underwriting and direct subscription in disbursements increased sharply over the 1990s, reflective of the diversification of their activities. The asset quality of DFIs was seriously eroded,

Table 3: Earnings and Expenses of Scheduled Commercial Banks

(Rs. Crore)

Year	Total Assets	Total Earnings	*Of which* Interest Earning	Total Expenses	Interest Expenses	Establish-ment Expenses	Profit	Net Interest Earning
1951	1,171	45 (3.8)	36 (3.1)	31 (2.6)	10 (0.9)	15 (1.3)	14 (1.2)	26 (2.2)
1969	6,840	427 (6.2)	361 (5.3)	379 (5.5)	190 (2.8)	141 (2.1)	48 (0.7)	171 (2.5)
1980	58,224	4,232 (7.3)	3,754 (6.4)	4,179 (7.2)	2,717 (4.7)	1,004 (1.7)	53 (0.1)	1,037 (1.8)
1991	3,27,512	30,404 (9.3)	27,521 (8.4)	29,661 (9.1)	18,968 (5.8)	7,596 (2.3)	743 (0.2)	8,553 (2.6)
2000	11,05,464	1,14,930 (10.4)	99,184 (9.0)	1,07,685 (9.7)	69,041 (6.2)	27,583 (2.5)	7,245 (0.7)	30,143 (2.7)
2002	15,36,425	1,51,032 (9.8)	1,26,958 (8.3)	1,39,456 (9.1)	87,516 (5.7)	33,679 (2.2)	11,576 (0.8)	39,441 (2.6)
2003	16,98,916	1,72,374 (10.2)	1,40,718 (8.3)	1,55,297 (9.1)	93,607 (5.5)	38,085 (2.2)	17,077 (1.0)	47,111 (2.8)

Figures in brackets are ratios to total assets. **Source:** Reserve Bank of India.

Table 4: Position of Cooperative Credit Institutions in India

	1979-80	1989-90	1999-2000	2002-03
Urban Cooperative Banks				
Number	1,083	1,390	1,618	1,951
Deposits (Rs. Crore)	913	8,660	80,840	1,01,546
Loans outstanding (Rs. Crore)	686	6,802	45,995	64,880
Credit-Deposit Ratio (per cent)	75	79	65	64
State Cooperative Banks				
Number	27	28	29	29
Deposits (Rs. Crore)	1,226	5,883	29,557	37,439
Loans outstanding (Rs. Crore)	1,420	6,883	25,709	34,864
Credit-Deposit Ratio (per cent)	79	86	87	93

Source : Reserve Bank of India.

especially in the second-half of the 1990s, owing to several factors, including drying up of concessional funds, downturn in the industrial sector, large exposure to traditional industries affected by restructuring and softening of interest rates. While some DFIs were able to pro-actively respond to the increased competition, several others were not. Competition on the asset side has also become manifold with banks entering the domain of long-term finance. All these factors significantly impinged on the profitability of DFIs. As DFIs have high NPLs, they would be required to provide for them, which is likely to put a further pressure on their profitability. Since some of the major DFIs have changed their character and converted to banks, comparable data is not available.

Non-Banking Finance Companies

There is considerable diversity in the composition, structure and functioning of NBFCs. Deposits of NBFCs witnessed a substantial increase since 1970s in tandem with a manifold increase in the number of reporting companies from 2,242 in 1969 to 11,010 in 1993. Subsequent upon the introduction of the new regulatory framework in 1997-98, the deposits of NBFCs have witnessed a marked decline (Table 6).[9]

Table 5: Select Indicators of Competition and Efficiency of Cooperative Banks

(per cent)

	1997-98	1998-99	1999-2000	2000-01	2002-03
Interest Spread as a Proportion of Assets					
Scheduled Urban Cooperative Banks	3.8	3.2	3.2	2.8	2.1
State Cooperative Banks	2.0	1.5	1.9	2.1	2.3*
Central Cooperative Banks	3.1	3.1	3.0	3.0	3.0*
Operating Expenses as a Proportion of Assets					
Scheduled Urban Cooperative Banks	2.4	2.1	2.1	2.0	1.9
State Cooperative Banks	0.9	0.8	0.8	0.7	0.7*
Central Cooperative Banks	2.2	2.2	2.0	1.8	1.7*
Net Profit as a Proportion of Assets					
Scheduled Urban Cooperative Banks	0.5	0.9	0.8	-2.3	-1.1
State Cooperative Banks	-0.4	-0.2	0.3	0.4	0.3*
Central Cooperative Banks	-0.4	0.1	0.1	0.1	-0.03*
Profitable Cooperatives as a Proportion of the Total Cooperatives					
Scheduled Urban Cooperative Banks	n.a.	n.a.	98.0	94.1	85.9
State Cooperative Banks	n.a.	75.9	79.3	76.7	n.a.
Central Cooperative Banks	n.a.	67.8	61.6	66.8	n.a.

* for 2001-02; n.a: Not Available.

Source : Reserve Bank of India.

9 **There are certain problems of comparability of data on NBFC deposits. In 1993-94, there was a change in the ambit of deposits with NBFCs. Thereafter, in 1997-98, there had been an overhaul of the regulatory framework for NBFCs; consequently, the coverage of deposits changed as well.**

Table 6: Deposits with Non-Banking Finance Companies

Period	As percent of Bank Deposits	As percent of GDP
1970-71 to 1974-75	0.71	0.12
1980-81 to 1984-85	0.46	0.14
1990-91 to 1992-93	1.18	0.45
1996-97	9.47	3.90
1997-98	3.70	1.57
1999-2000	2.16	1.10
2000-01	1.66	0.86
2001-02	1.56	0.82

Note : Deposits of NBFCs, for the period 1970-71 to 1996-97 refer to regulated deposits.

Source : Reserve Bank of India.

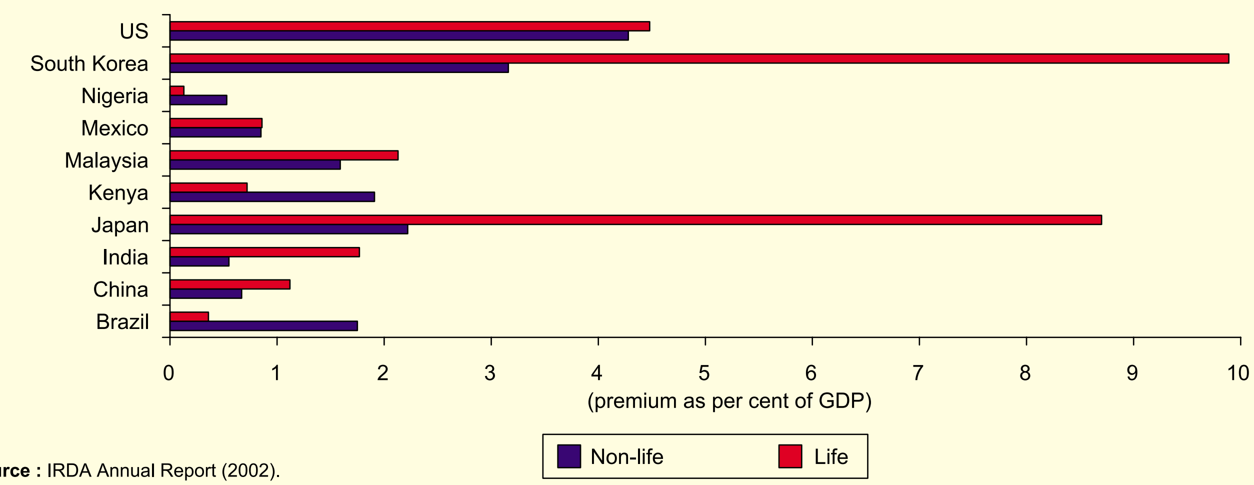
Insurance Companies

There are two broad indicators of the performance of the insurance industry, *viz.*, penetration ratio and insurance density. These ratios for India *vis-à-vis* select emerging market economies indicate that in terms of both the indicators, India's relative international position for life insurance industry is stronger compared to non-life insurance industry (Charts 3 and 4). As on March 31, 2002 there were 11 private sector participants in life insurance business and 6 in the non-life segment. Most of the private companies in the Indian insurance sector have been set up as joint venture with participation of foreign partners holding 26 per cent of the total paid-up equity capital.[10] The current profile of the Indian insurance industry reflects that, notwithstanding the entry of private sector players, in terms of both assets and liabilities, insurance companies from the public sector continue to dominate the Indian insurance industry. Notwithstanding this, given the fast pace of growth in life and non-life insurance industry, private players have been able to market their products (IRDA, 2002).

Capital Markets

The 1990s have been remarkable for the Indian equity market. The market has grown exponentially in terms of resource mobilisation, number of stock exchanges, number of listed stocks, market capitalisation, trading volumes, turnover and investors' base (Table 7). Along with this growth, the profile of the investors, issuers and intermediaries have changed significantly. The market has witnessed a fundamental institutional

Chart 3: Relative Position of India's Insurance Sector in Terms of Penetration Ratio in 2000



Source : IRDA Annual Report (2002).

10 **Under the current norms, the maximum limit on foreign participation in the insurance companies operating in India is 26 per cent.**

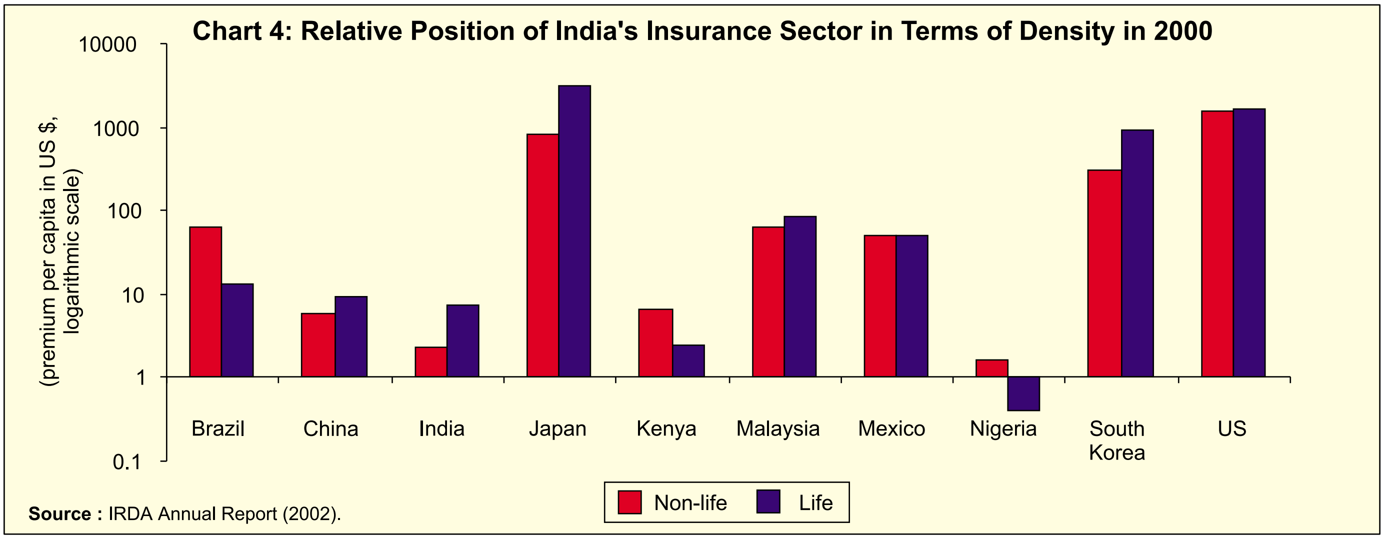


Table 7: Select Stock Market Indicators in India

Year (end-March)	1961*	1971*	1980*	1991	2000	2002	2003
Number of stock exchanges	7	8	9	22	23	23	23
Number of listed companies	1,203	1,599	2,265	6,229	9,871	9,644	9,413
Market capitalisation (Rs. crore)	1,200	2,700	6,800	1,10,279	11,92,630	7,49,248	6,31,921

* end-December, BSE only.
Source : The Stock Exchange, Mumbai and National Stock Exchange.

change resulting in drastic reduction in transaction costs and significant improvement in efficiency, transparency and safety (NSE, 2002). In the 1990s, reform measures initiated by SEBI, market determined allocation of resources, rolling settlement, sophisticated risk management and derivatives trading have greatly improved the framework and efficiency of trading and settlement. Almost all equity settlements take place at the depository. As a result, the Indian capital market has become qualitatively comparable to many developed and emerging markets.

Although the Indian capital market has grown in size and depth in the post reform period, the magnitude of activities is still negligible compared to those prevalent internationally. India accounted for 0.40 per cent in terms of market capitalisation and 0.59 per cent in terms of global turnover in the equity market in 2001 (Table 8). The liberalisation and

Table 8: Select International Stock Market Indicators

Country / Year	Market Capitalisation Ratio (per cent)*		Turnover Ratio (per cent)**		No. of Listed Companies	
	1990	2000	1990	2000	1990	2000
East Asia & Pacific	21.3	48.3	117.2	149.9	1,443	3,486
Europe and Central Asia	2.1	20.5	n.a.	83.1	110	8,220
South Asia	10.8	27.0	54.0	161.6	3231	7159
High Income Countries	51.7	120.6	59.5	129.9	17,078	25,548
India	12.2	32.4	65.9	191.4	2,435	5,795

n.a. : Not available. * Market capitalisation to GDP ratio. ** Volume of trade in the secondary market to market capitalisation.
Source: World Bank.

consequent reform measures have drawn attention of foreign investors and led to rise in the FIIs investment in India. During the first half of the 1990s, India accounted for a larger volume of international equity issues than any other emerging market (IMF Survey, 1995). Presently, there are nearly 500 registered FIIs in India, which include asset management companies, pension funds, investment trusts, and incorporated institutional portfolio managers. FIIs are eligible to invest in listed as well as unlisted securities.

Debt Market

The Central Government's reliance on market borrowings to meet its fiscal deficit has increased substantially during the 1990s while dependence of the State Governments has not witnessed much increase. The combined net market borrowings of the central and the State Governments during 2002-03 amounted to Rs.1,33,182 crore as against Rs.10,557 crore in 1990-91, *i.e.*, a more than ten-fold increase. Though the Indian debt market ranks third in Asia, after Japan and South Korea, in terms of issued amount, it is still underdeveloped if size of the Indian GDP with the outstanding size of the debt floatation is compared. Although in terms of the primary issues Indian debt market is quite large, the Government continues to be the large borrower, unlike South Korea where the private sector is the main borrower (Patil, 2001). Presently, despite the increasing diversification of the debt market in terms of the number and variety of instruments available, government securities account for a major portion of the debt market in India both in terms of outstanding stock, market capitalisation, trading volume and number of participants. The average maturity period presently turns out to be 7.5 years (Thorat, 2002).

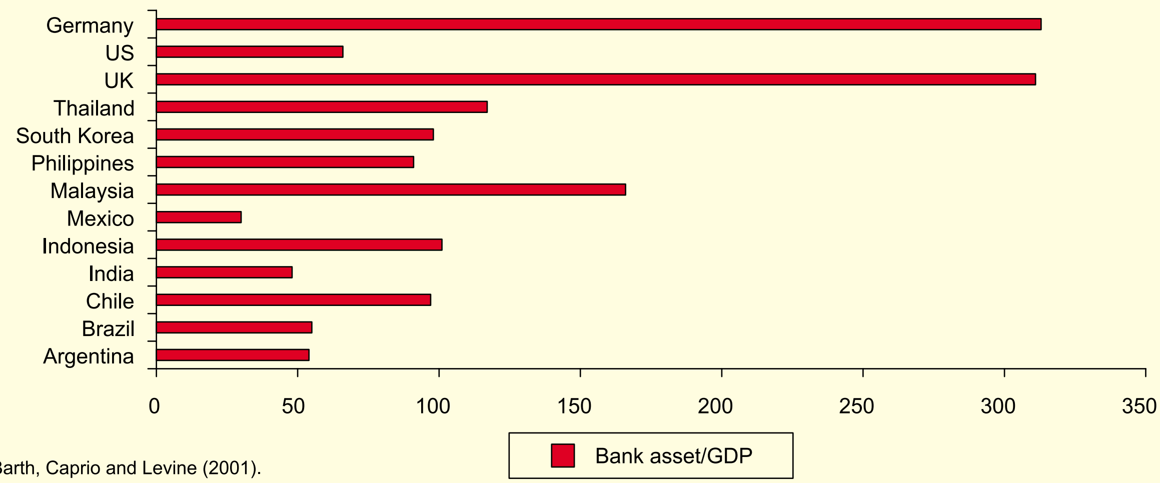
The corporate debt market is still at a nascent stage. Since the mid-1990s, private placement has emerged as the most important component of the primary issues market. The reason for rapid growth in the private placement market lies in the convenience, flexibility, low cost of issuance as well as tailor-made deals suited to both issuers and subscribers. The private placement market is also preferred by corporates wishing to issue securities with complex or non-standard features.

3. Some Perspectives for the Future of the Indian Financial System

The basic emphasis of the Indian approach remains the creation of an enabling environment so as to foster deep, competitive, efficient and vibrant financial institutions and markets, with emphasis on stability. A number of measures have been initiated to achieve convergence with international best practices. Keeping in view the fast pace of technological innovations in the financial sector and product development at the international level, the focus has been to bring the Indian financial system at par with such standards. However, while adapting to international standards and trends, special attention is being devoted so as to customise norms and standards keeping in view various country-specific, including institution-specific considerations.

As the economy begins to grow rapidly, the process of financial intermediation is likely to increase. However, in the Indian case, the ratio of bank assets to GDP is low (Chart 5) among developing countries (Barth et al., 2001). By

Chart 5: Bank Asset/GDP in Select Countries

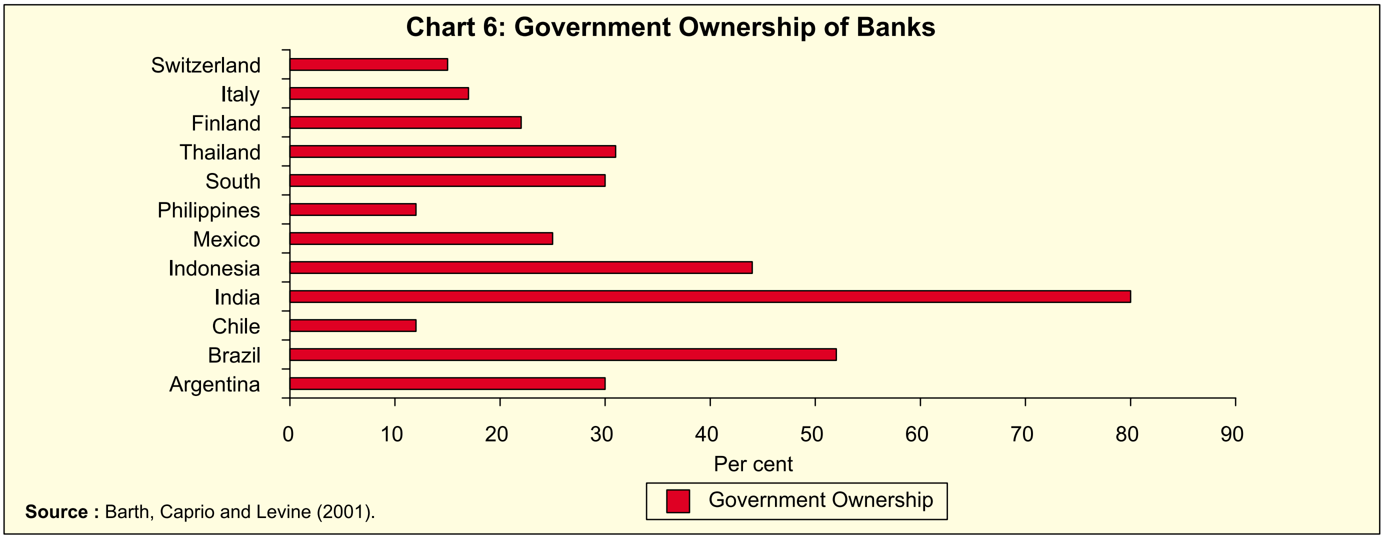


Source : Barth, Caprio and Levine (2001).

comparable international standards, although the financial reach of the system is high, the extent of financial widening is much lower. This would mean that there is a lot of room for credit expansion to take place, which, in turn, envisages enhanced credit appraisal and risk management skills, which is an important challenge.

At present, around 76 per cent of the banking sector assets are accounted for by public sector banks, with the remaining being accounted for by private and foreign bank categories. The share of non-public sector banks has been increasing continuously over the last few years, with a sizeable rise in the market share (in terms of assets) being evident for new private banks. It is not difficult to imagine that the new private banks, with no legacy of economic structure and with their ability to leverage technology to produce highly competitive types of banking, are comparatively better placed to outperform their public sector counterparts. This would imply a rise in their market share along with the foreign bank group and accordingly, a concomitant decline in the market share for public sector banks. The scope for this expansion obviously depends on the expansion of the total banking system. As it stands, the intermediation process has been taking place parallel with the development of the capital market. Therefore, the issue remains for public sector banks as to how to adjust the loss of relative market share in an environment where the absolute size of the pie is not expanding rapidly. Moreover, the ability of different public sector banks to cope up with this challenge is likely to be quite different, which is an important issue that would need to be addressed.

An important issue relates to the manner in which public sector banks would cope when Government ownership is reduced to 33 per cent, which is likely to be fructified once the Banking Companies (Acquisition and Transfer of Undertakings) and Financial Institutions (Amendment) Bill, 2000 is passed by the Parliament. In fact, international evidence tends to suggest a significant scaling down of Government ownership in the banking system (Chart 6) in most countries (Barth *et al.*, 2001). In such a scenario, banks will have to embrace modern management and corporate governance practices and acquire higher quality of human capital.



Another major concern for the banking system is the high cost and low productivity as reflected in relatively high spreads and cost of intermediation. Both spreads and operating costs, measured as percentage of total assets of banks have generally been higher *vis-à-vis* developed countries (Hawkins and Mihaljek, 2001). An important challenge for the banking sector, therefore, remains its transformation from a high cost, low productivity structure to a more efficient, productive and competitive set up.

The capital requirement of banks is likely to increase in the coming years with the pick up in credit demand and the implementation of Basel II norms around 2006, which has accorded greater emphasis on risk-sensitivity in credit allocation. Banks would need to increase their profitability to generate sufficient capital funds internally, since maintaining the additional capital position in line with the prescribed norms could pose a major challenge.

Commercial banks continue to face the problem of the overhang of NPLs, attributable, *inter alia*, to systemic factors such as weak debt recovery mechanism, non-realisability of collateral and poor credit appraisal techniques.[11] The recent enactment of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act has increased the momentum for the recovery of NPLs. Banks need to intensify their efforts to recover their overdues and prevent generation of fresh NPLs.

In a regulated regime, risks were essentially compartmentalised with various categories of market and credit risks being managed separately. Increasingly, risk is viewed as multi-dimensional. Banks would need to establish the technical systems and management processes necessary not only to identify the risks associated with their activities, but also to effectively measure, monitor and control them.

A major challenge facing the banking and financial community emanates from the high growth in volumes of financial transactions and the impact of today's globalisation efforts the world over. Traditional geographical boundaries

11 **Honohan (1997) advocates 'speed limits' to restrict the rate of growth of banks' loan portfolios.**

are getting blurred and greater challenges are confronting banks owing to the explosion of technology. It is in this context that there is an imperative need for not mere technology upgradation but also integration of technology with the general way of functioning of banks.

Internationally, deposit insurance has been recognised as an important component of the financial safety net for a country. A risk-based deposit insurance premium system has been identified as a measure that can reduce negative externalities of the deposit insurance system. Introduction of such a system is currently under consideration of the Government. It has also been announced that DICGC of India would be restructured as a pure deposit insurance institution for banks.

In view of the gradual withdrawal of DFIs from longer-term financing, an issue remains about how to fill the void being created by such restructuring. There is a need to develop the private corporate debt market and introduce appropriate instruments to reduce the risk arising out of long-term financing by other players such as banks.

In recent times, attempts have been made to achieve regulatory and supervisory convergence between commercial and cooperative banks in certain key areas including prudential regulations. These steps are in the interest of the stability of the overall financial system as well as healthy development of the cooperative credit institutions. However, in view of the impaired capital position of many cooperatives and their large overhang of NPLs, achieving such convergence would prove to be difficult. It is, however, for the cooperative banks themselves to build on the synergy inherent in the cooperative structure and stand up for their unique qualities. In this context it is encouraging to note that during the recent years in the face of the restructuring process, cooperative banks are making efforts to reduce their operating cost.

The issue of corporate governance has assumed prominence in recent times, more so in view of the recent accounting irregularities in the US. The quality of corporate governance would become critical as competition intensifies, ownership is diversified and banks and cooperatives strive to retain their client base. This would necessitate significant improvements in areas such as housekeeping, audit practices, asset-liability management, systems management and internal controls in order to ensure the healthy growth of the financial sector.

Prior to enactment of legislative reforms for NBFCs, they mobilised a significant portion of their fund in the form of public deposits, often at high interest rates. This, coupled with relaxed regulatory and supervisory arrangements for NBFCs, created negative externalities including moral hazard. Introduction of reform measures for NBFCs has, however, substantially eliminated such problems and the share of public deposits in the total liability of NBFCs has declined substantially. Notwithstanding this, protection of the depositors' interests remains paramount. Towards this objective, the RBI continues to pursue with various State Governments the case for enacting legislation for protection of interest of depositors in financial establishments. Creating public awareness about activities and risk-profile of NBFCs along with improvement in corporate governance practices and financial disclosures needs to be focused upon in future.

The entry of private sector players in the insurance sector is yet to make a significant dent in the market share of the public sector entities. Recent evidence, however, suggests that the state-of-the-art services provided by private players have begun to make an impact on the existing insurance industry. Accordingly, promoting the role of competitive forces in the process of insurance liberalisation is essential, not only for customer choice, but also for raising resources for long-term infrastructure finance.

In the securities market, instituting enabling legal reform poses an important challenge for its orderly growth. A number of reforms in the financial system have been held back pending legal changes.

There is lack of transparency in the corporate debt market, which is operating predominantly on a private placement basis. A wholesome view has to be taken by the different regulators to develop a vibrant corporate debt market.

4. Lessons from the Indian Experience

The process of globalisation has important implications for the financial sector and the institutions comprising it. In an increasingly globalised environment, the role of the policy maker in the domestic institutional building process can be envisaged in the form of providing a stable macroeconomic environment, increasing competition, establishing a strong regulatory and supervisory framework, evolving an enabling legal system and strengthening technological infrastructure. A well-knit institutional set up facilitates the growth and development process of an economy. Effective institutions can make the difference in the success of market reforms. If the financial system is well diversified and the markets are liquid and deep, effective mobilisation and allocation of resources will be ensured. Many broad generalisations can be discerned from the Indian experience.

Development of the Indian financial system is premised on the conviction that financial development makes fundamental contributions to economic growth. At the time of Independence, the financial system was fairly liberal. By the 1960s, controls over the financial system were tightened and aligned in accordance to the centralised Plan priorities. The priority was to set up institutions to mobilise saving and allocate the saving to specified sectors. The RBI was vested with the responsibility of developing the institutional infrastructure in the country. Towards this end, controls on lending and deposit rates were introduced and specialised development banks, catering to varied segments of the economy were established. This institutional design did not achieve the desired results. The process culminated with the two-stage nationalisation process of banks, first in 1969 and thereafter in 1980. Around the same time, the insurance business was also brought under the domain of Government control in phases. The process of nationalisation expanded the reach of financial services to remote parts of the country. However, the basic principle of mobilising savings and channeling resources to certain sectors at a price not related to the market remained. Notwithstanding the numerous achievements of 'social banking', such as branch expansion and diversion of credit to rural sectors, the high degree of controls on the financial system also manifested itself in several inefficiencies.

In order to address these shortcomings, gradual liberalisation of the financial system was initiated in the late 1980s, which received greater momentum in the 1990s. The closed-economy framework gradually gave way to greater externally oriented and liberal financial system. The 1990s witnessed the advent of economic reforms in the country encompassing trade, industry and the real sectors. The external sector was liberalised. The country adopted a flexible exchange rate regime early in the reform period and encouraged non-debt creating flows in the form of foreign direct investment and foreign institutional investment. Liberalisation of the external current account was also undertaken early in the reform cycle. The macroeconomic environment then influences institutional building. As the economy opens up, the financial system can no longer afford to remain repressed. The financial system also has to undertake reforms in the form of interest rate deregulation, prudential regulation, good supervisory standards, legal changes and technological upgradation. New institutions operating on market principles have to emerge and old institutions would either have to change to cope with the emerging changes or close. Thus, macroeconomic reform and reforms in the financial system have to progress simultaneously. In the early 1990s, a wide-ranging set of reforms were undertaken, encompassing both financial institutions and markets. These reforms paved the way for more market-driven allocation and pricing of resources. The process of globalisation has tended to exhibit itself, both domestically, in terms of greater integration of domestic financial markets with global ones and internationally, in terms of the adoption of a process of gradual convergence with international best practices.

The pre-reform experience suggests that governments that suppress their financial systems in order to finance spending, end up with underdeveloped, inefficient and repressed financial systems. Prior to reforms, Indian institutions were typically set up to mobilise savings and allocate resources at administered rates. Initially, the authorities concentrated on regulating both the quantity and cost of credit. This undermined the efficiency of the financial system and ultimately led to financial repression. The post- reform institutional structure recognised the need for institutions to be market based. The major elements for adequate development of the financial sector in India constituted a stable macro economic environment, competition, effective prudential regulation, sound supervision, enabling legal framework and modern technological infrastructure.

The driving forces for important innovations in the financial system can come from within or from external forces. In fact, in the Indian case, although the trigger for the economic reform process was the balance of payments crisis resulting from the Gulf war of 1990, the reforms in the financial sector were the result of a well-crafted internal strategy. The early part of macroeconomic reform saw changes in the exchange rate system, the opening up of the economy to foreign investors and adoption of current account convertibility. This necessitated the financial system to undertake reform to keep pace with the changes in the other sectors of the economy. The Indian experience suggests that it was slightly ahead of the learning curve insofar as the implementation of reforms in the financial sector was concerned. The process was initiated through High-Level Committees that provided road maps for implementation of reforms so as to progressively reach international best standards while taking the unique country circumstances into consideration. For instance, in the first phase, greater emphasis was placed on policy deregulation (interest rate deregulation, easing of statutory preemptions, *etc.*), improving prudential norms (imposing capital adequacy ratio, asset classification, exposure norms, *etc.*), infusing competition (permitting entry of new private sector banks), diversifying ownership, developing money, debt and foreign exchange markets (for risk-free yield curve and monetary policy transmission as well as global integration), establishing regulatory and supervisory standards (Board for Financial Supervision) and insisting on greater transparency and disclosures. It was only in the second stage that many legal amendments (Securities Contract Regulation Act, Government Securities Bill, SARFAESI Act, *etc.*) and diversification of ownership of public sector banks, *etc.*, were undertaken.

The Indian experience also shows that there is no optimal sequencing in respect of either policies or institutions, both within and across countries. For instance, some countries that reformed after a crisis did so with a ‘big bang’, while others such as India followed a ‘gradualist’ approach. In fact, reforms in the financial and external sectors were not treated as a discrete event, but as a continuous and complementary process. For instance, in the Indian context, reforms in the financial sector were undertaken in the early part of the economic reform cycle and embraced the banking sector in view of its dominance in the financial sector and the money and Government securities markets initially in view of their inexorable linkages with the rest of the financial system. Reform of development financial institutions, cooperative banking institutions and non-banking financial companies followed. Further, in India, prudential reforms were implemented first and the structural and legal changes followed whereas in some countries, legal changes have preceded prudential and structural reforms.

There is also no threshold level of institution building that should precede capital market opening. It can happen simultaneously or in any sequence. In the equity market, many of the good institutional practices like, clearing house, settlement house and technological infrastructure for trading came at a much later stage of development of capital markets. In the Government securities market, in the early 1990s, with the switchover to market-based pricing of debt, expansion of the market took place rapidly without the adequate infrastructure for transparent trading and prompt settlement. This asymmetry resulted in certain irregularities, which provided the impetus for the authorities to undertake rapid reforms in the market. In the Government securities market, good settlement practices, and institutions to develop primary and secondary markets, therefore, came up in the early phase of reform. In fact, the RBI set up institutions to develop the money and gilts markets and later divested the institutions that it owned, the strategy being to avoid the moral hazard of RBI acting as lender of last resort. The subsequent phase of institution building in the markets fostered transparent and efficient market practices and helped in risk containment (e.g. NDS, CCIL, PDs, screen-based system for trade in gilts).

The role of technology is very critical for institution building in the sense that it increases efficiency by globalising the market. Technology reduces the time and cost required to implement initiatives for strengthening the financial sector. Examples are the setting up of Automated Teller

Machines (ATMs) that increased the reach of the people to banks. In the financial markets, technology has been harnessed to increase transparency (Negotiated Dealing System), reduce risk in settlement (CCIL), enable price discovery through screen-based auctions and hedge market risks through screen based trading system for derivatives. The equity market also employed a complete transformation of the market design as well, as stock exchanges switched to order matching by computers. In the equity and debt markets, depositories eliminated the operational vulnerabilities associated with physical certificates. These changes added up to a complete transformation of the market design. This was accompanied by a corresponding transformation of human capital in the financial services industry.

It is very critical that reforms maintain a balance between efficiency and stability, especially in an emerging market economy like India. Greater competition modifies the effectiveness of existing institutions. It improves efficiency, increases incentives for innovation and promotes wider access. There is, therefore, a need to modify existing institutions to complement the new and better institutions. It is important that the transition is managed without disruption to the market and the economy. The Indian approch of cautious liberalisation vindicates this position, since the balance between markets and the State is delicate. The Indian experience shows that consultations with market practitioners, and the announcement of a time table for reforms designed to give time for market players to adjust goes a long way in ensuring stability.

The intervention of governments and the central bank in institution building depends on specific country circumstance. In India, the government and central bank were directly involved in institution building from the time of independence. However, the main difference was that the pre-reform period was characterised by micro management of institutions by government and central bank whereas in the post-1991 period, institutions have had greater autonomy and flexibility in operations and monitoring while regulations were more market based and incentive driven. Effective institutions are those that are incentive compatible. An important issue in the design of institutions is in ensuring that the incentives that are created actually lead to the desired behaviour. Greater competition modifies the effectiveness of existing institutions. It improves efficiency, increases incentives for innovation and promotes wider access. There is, therefore, a need to modify existing institutions to complement the new and better institutions.

A well architectured financial system mitigates and diversifies risks, but a badly designed system can lead to magnification of risks. The challenge to policy makers is to build a financial system that assists in risk mitigation. It is well recognised by now, especially after the Asian crisis, that a multi-institutional financial structure mitigates the risk to the financial system. The Indian experience vindicates this stance. Banks, DFIs, and capital markets have co-existed from the post-independence era; only that the character of these institutions has changed depending on the evolutionary stage of the economy. In this context, development of a domestic debt market becomes important. The motivation for development of a debt market can arise from different reasons *viz.*, to develop corporate debt market, overall financial market development, existence of a dominant Government securities market (like in India), part of pension reform, *etc.* Globalisation can be a driving force in this regard. In a simplistic sense, as market opens up and forex reserves accumulate, the need for sterilisation itself would motivate development of financial markets. As foreign investors and foreign direct investment comes in, the need for transparency, institutional mechanism, good settlement and payment systems *etc.* will predominate. The Government securities market is the most dominant component of the debt market in India. Among others, the key elements of development of Government securities market have been institutional development, infrastructure development, technological infrastructure, and legal changes.

A salient feature of the move towards globalisation has been the intention of the regulators and the responsiveness of the authorities to progress towards international best practices. An institutional process in the form of several Advisory Groups set upon the task of benchmarking Indian practices with international standards in areas relating to monetary policy, banking supervision, data dissemination, corporate governance and the like. Although the standards have evolved in the context of international stability, they have enormous efficiency-enhancing value by themselves. Standards by themselves may be presumed to be, *prima facie*, desirable, and it is, therefore, in the national interest to develop institutional mechanisms for consideration of international standards. Thus, the implementation of standards needs to be given a domestic focus with the objectives of market development and enhancing domestic market efficiency (Reddy, 2002).

5. Conclusion

Reform efforts in terms of strengthening of prudential norms, enhancing transparency standards and positioning best management practices are an ongoing process. Efforts are also on for furtherance of efficiency and productivity within an overall framework of financial stability. Organised banking has made its presence felt in remote parts of the country. Insurance, hitherto a public sector monopoly, has since been transformed into a competitive market in both life and non-life segments. Strengthening corporate governance in cooperative banks has been making headway. Disclosures standards have been strengthened for non-banking financial companies. DFIs are also restructuring themselves in an era of global competition. A great deal of reforms has been undertaken in most areas of financial sector, reflected in the growing sophistication of the financial system. The resilience of the system is reflected in terms of absence of any major crisis in the financial system, a sustainable and broad-based growth environment, lower levels of inflation and strong external sector position. No doubt, the institutional framework in the financial sector had a major role to play in this process and the globalisation process in the financial sector has been beneficial for the economy. At the same time, the stance of the authorities has been pro-active, reacting to the macroeconomic policy stance, global challenges and constantly endeavouring towards international best practices. One can do no better than observe as to what Jalan (2001) reminds us, in a similar vein, "…India of 2025 will be a very different place, and a much more dominant force in the world economy, than was the case twenty five years ago or at the beginning of the new millennium".

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Select Chronology on Developments in the Indian Financial Sector

Year	Event
1770	Bank of Hindustan, the first bank in India on modern lines, established.
1850	First general insurance company established.
1875	Bombay Stock Exchange started formal trading.
1918	Oriental Life Insurance Company established.
1921	Three Presidency banks, Bank of Bengal, Bank of Madras and Bank of Bombay, merged into Imperial Bank.
1926	Establishment of Hilton-Young Commission to suggest a central bank for the country.
1935	Establishment of Reserve Bank of India as the central bank.
1947	Control of Capital Issues Act imposed restrictions on issue of capital.
1948	Establishment of Industrial Finance Corporation, the first DFI
1955	Imperial Bank taken over by State Bank of India; Establishment of Industrial Credit and Investment Corporation of India.
1956	Life Insurance Company of India came into effect; Securities Contract (Regulation) Act impacted directly and indirectly on securities trading, running of stock exchanges and prevention of undesirable transaction.
1962	Deposit Insurance Corporation established.
1963	Insertion of a new Chapter in RBI Act, 1934 to effectively supervise, control and regulate deposit-taking activities of NBFCs.
1964	Establishment of Industrial Development Bank of India.
1966	Deposit insurance extended to co-operative banks.
1969	Nationalisation of 14 largest banks commercial banks.
1973	Nationalisation of general insurance companies; Foreign Exchange Regulation Act (FERA) was promulgated which provided an opportunity to develop Indian equity market.
1975	Establishment of Regional Rural Banks.
1980	Second round of nationalisation of 6 commercial banks.
1982	Establishment of National Bank for Agriculture and Rural Development; First credit rating agency established in India.
1990	Establishment of Small Industries Development Bank of India.
1991	Report of the Committee on the Financial System, which provided the blueprint for first generation financial sector reforms.

Year	Event
1992	Introduction of prudential norms for income recognition and asset classification; SEBI obtained statutory powers to promote orderly development of capital market; Incorporation of National Stock Exchange (NSE) as the first screen-based and transparent trading platform for investors; Introduction of auction system for Government securities.
1993	Introduction of depositories.
1994	Board for Financial Supervision, an autonomous body under the aegis of RBI, established; New guidelines for entry of new private sector banks announced; Wholesale debt market operations initiated by NSE.
1996	Establishment of Institute for Development and Research in Banking Technology; Depositories Act was passed which allowed for holding of securities in dematerialised form.
1997	Promulgation of RBI (Amendment) Act for intensified regulation of deposit-taking NBFCs; Termination of automatic monetisation of Government deficit; Bank Rate activated as a signaling rate; Statutory Liquidity Ratio (SLR) reduced to 25% (legal minimum)
1999	Insurance Regulation and Development Act passed allowing new players/joint ventures to undertake insurance business; Detailed guidelines on risk management in banks announced; Standing Committee on International Financial Standards and Codes set up to evolve sound standards based on recognised best practices.
2000	Guidelines issued regarding interest rate swaps and forward rate agreement to enable financial entities to hedge interest rate risk; New guidelines for categorisation and valuation of banks' investment portfolio announced; Liquidity Adjustment Facility introduced; Foreign Exchange Management Act, replacing the earlier FERA, introduced.
2001	Establishment of Credit Information Bureau of India Ltd.
2002	Revised guidelines announced for entry of new private banks; Enactment of SARFAESI Act for enforcement of security interest for secured creditors; Establishment of first universal bank in the country; Clearing Corporation of India Limited became operational; Consolidated guidelines issued on FDI in banking.
2003	Central Listing Authority was constituted.