Indian Financial Sector After a Decade of Reforms

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1 Introduction

The economic reform process that began in 1991 took place amidst two acute crises involving the financial sector:

- the balance of payments crisis that threatened the international credibility of the country and pushed it to the brink of default; and
- the grave threat of insolvency confronting the banking system which had for years concealed its problems with the help of defective accounting policies.

Moreover, many of the chronic and deeper-rooted problems of the Indian economy in the early nineties were also strongly related to the financial sector:

- the problem of financial repression in the sense of McKinnon-Shaw (McKinnon, 1973; Shaw, 1973) induced by administered interest rates pegged at unrealistically low levels;
- large scale pre-emption of resources from the banking system by the government to finance its fiscal deficit;
- excessive structural and micro regulation that inhibited financial innovation and increased transaction costs;
- relatively inadequate level of prudential regulation in the financial sector;
- poorly developed debt and money markets; and
- outdated (often primitive) technological and institutional structures that made the capital markets and the rest of the financial system highly inefficient.

Financial sector reforms have therefore been an important part of the overall reform process. Yet, after a decade of reforms, many of the deep seated problems in the financial sector remain. The hopes that were raised by the impressive progress in the initial years of the reforms have not been fulfilled. The state has not relinquished its grip on the financial sector. Except in isolated pockets, competition has not been unleashed in the financial sector on a scale sufficient to produce visible benefits in terms of efficiency, innovation and customer service.

This paper begins with a critical review of financial sector reforms in some key areas. It then goes on to assess the impact that these reforms have had on the corporate sector and on retail investors. Finally, the paper outlines the unfinished agenda of reforms in the financial sector. This paper draws on several papers that I have written on the subject in the last decade (particularly Varma, 1992, 1996, 1997, 1998a and 2000 and Barua and Varma, 1994)

2 Exchange Control and Convertibility

2.1 Early Success

One of the early successes of the reforms was the speed with which exceptional financing was mobilized from multilateral and bilateral sources to avert what at one stage looked like a imminent default on the country's external obligations. Subsequently, devaluation, trade reforms and the opening up of the economy to capital inflows helped to strengthen the balance of payments position. Substantial reserves were built up out of non-debt-creating capital inflows.

The significant reforms in the area of exchange control were:

- Exchange controls on current account transactions were progressively relaxed culminating in current account convertibility.
- Foreign Institutional Investors were allowed to invest in Indian equities subject to restrictions on maximum holdings in individual companies. Initially, there were severe restrictions on foreign investment in debt securities, but these were progressively relaxed.
- Indian companies were allowed to raise equity in international markets subject to various restrictions.
- Indian companies were allowed to borrow in international markets subject to a minimum maturity, a ceiling on the maximum interest rate, and annual caps on aggregate external commercial borrowings by all entities put together.
- Indian mutual funds were allowed to invest a small portion of their assets abroad.
- Indian companies were given access to long dated forward contracts and to cross currency options.

2.2 Subsequent Back Sliding

A substantial part of the reserve build-up has been out of non-debt-creating capital inflows. In later years, however, the government has resorted to borrowing (through the State Bank of India) in the form of the Resurgent India Bonds in 1998-99 and the India Millennium Deposits in 2000-01. These borrowings have been part of a conscious strategy of maintaining a strong exchange rate rather than seeking competitive parity with East Asian competitors and China.

Half way through the reform process, there were serious discussions on moving towards capital account convertibility. A report by the Tarapore Committee (Reserve Bank of India, 1997) prepared a detailed roadmap for such a move. At around this time, however, the Asian Crisis engulfed East and South East Asia. Policy makers in India were quick to conclude that there were major advantages in retaining tight controls on the capital account. However, this status quo posture carries grave risks because:

- The Indian economy is already substantially open to capital inflows, and the existing restrictions are predominantly on capital outflows.
- The capital account is significantly more open to the corporate sector than to individuals.
- India's unwillingness to match the sharp currency depreciation of its East Asian competitors makes it quite possible that the Indian Rupee has been overvalued from the point of view of export competitiveness (Acharya, 2001).

All these features were contributory factors in the East Asia (see Varma 1998b), and it is possible that maintenance of the status quo would create serious vulnerabilities in the long run for India as well.

In this context, it is heartening that the budget speech for 2002-03 has put capital account convertibility on the agenda once again though no significant steps have been taken in this direction.

3 Banking and credit policy

3.1 Banking System Solvency

At the beginning of the reform process, the banking system probably had a negative net worth when all financial assets and liabilities were restated at fair market values (Varma 1992). This unhappy state of affairs had been brought about partly by imprudent lending and partly by adverse interest rate movements. At the peak of this crisis, the balance sheets of the banks, however, painted a very different rosy picture. Accounting policies not only allowed the banks to avoid making provisions for bad loans, but also permitted them to recognize as income the overdue interest on these loans. The severity of the problem was thus hidden from the general public.

The first decade of reforms therefore included the following banking reforms:

- Capital base of the banks was strengthened by recapitalization, public equity issues and subordinated debt.
- Prudential norms were introduced and progressively tightened for income recognition, classification of assets, provisioning of bad debts, marking to market of investments.
- Pre-emption of bank resources by the government was reduced sharply.
- New private sector banks were licensed and branch licensing restrictions were relaxed.

The threat of imminent insolvency that loomed large in the early 1990s was, by and large, corrected by the government extending financial support of over Rs 200 billion to the public sector banks. The banks also used a large part of their operating profits to make provisions for non performing assets (NPAs). Capital adequacy was further shored up by revaluation of real estate and by raising money from the capital markets in the form of equity and subordinated debt. In the last couple of years, some public sector banks have also moved aggressively to cut costs by trimming the workforce and by divesting peripheral business units that have not been doing well.

It is noteworthy that the direct government support to the banking system was only about 2% of GDP. By comparison, governments in developed countries like the United States have expended around 5% of GDP to pull their banking systems out of crisis and governments in developing countries like Argentina and Chile have expended more than 15% of GDP (Sunderarajan and Balino, 1991, International Monetary Fund, 1993 and International Monetary Fund, 1998). There was however a large indirect support to the banking system in terms of a favourable regulatory regime that restricted competition within the banking system and smothered competition from outside the banking system (see 3.7 below).

The net effect of the government support and internal restructuring undertaken by the banks themselves was that with the exception of two or three weak banks, the public sector banks appeared to have put the threat of imminent insolvency behind them. In recent years, however, the banking system has had to contend with the debilitating effects of an ongoing recession in the manufacturing sector. This has led to significant non performing assets, and if the economic outlook continues to weaken, the financial health of the banking system could deteriorate sharply.

It is also pertinent to note that independent estimates of the percentage of bank loans that could be problematic are far higher than the reported figures on non performing assets, even though the accounting and provisioning norms have moved closer to international norms. During the Asian crisis, the international rating agency S&P published a report estimating potential (worst case) problem loans in the Indian banking sector at 35-60% of total bank credit (Standard and Poor, 1997). Subsequently, S&P has continued to re-affirm this estimate (most recently in Standard and Poor, 2001). By its very nature, the scenarios that underlie S&P's worst case analysis involve assumptions that are severe and unlikely to materialise. Nevertheless, the fact that S&P continues to place India in the weakest category of banking systems (alongside countries like China, Pakistan, Mexico, Thailand and the former CIS countries) is an indication of the potential weaknesses in the banking system.

It would thus appear that while the imminent threat of insolvency that existed at the beginning of the reforms has receded, the threat remains latent.

3.2 Governance and Lending Practices

An even more important question is whether the banks' lending practices have improved sufficiently to ensure that fresh lending (in the deregulated era) does not generate excessive non performing assets (NPAs). That should be the true test of the success of the banking reforms. There are really two questions here.

The first question is whether the banks have achieved sufficient managerial autonomy to resist the kind of political pressure that led to excessive NPAs in the past through lending to borrowers known to be poor credit risks. A decade after reforms, it is evident that this has not happened. It is true that in the initial years of the reforms, the political system appeared to have exercised greater restraint in its use of the banking system as a tool for patronage. But this has not been institutionalised in a culture of managerial autonomy, and there is no assurance that the political self restraint will endure.

The second question is whether the banks' ability to appraise credit risk and take prompt corrective action in the case of problem accounts has improved sufficiently. It is difficult to give an affirmative answer to this question.

The managerial response to the threat of non performing assets has been a flight to quality rather than an attempt to improve their credit assessment skills and systems. The RBI's annual report for 2001 points out that "As at end-March 2001, commercial banks held SLR[1] securities amounting to 35.1 per cent of their net demand and time liabilities as compared with the statutory SLR requirement of 25.0 per cent. Banks' holding of SLR paper, amounting to about Rs.1,06,000 crore over and above the SLR requirement, was substantially higher than the net annual borrowings of the Central Government."

Some of the reticence to lend is attributable to the increased fear of the anti-corruption wing of the government. There has been a tendency on the part of this wing to regard every non performing loan as a potential case of corruption on the part of the lending officer. Even if the officer is acquitted at the end of the investigations, the investigation procedures are such that the officer would in the meantime have undergone significant mental agony and might also have lost out on several opportunities. The result is a strong disincentive to take lending decisions. Paradoxically, the result of the anti-corruption measures may actually be to increase corruption and worsen the lending portfolio. This is because the honest officers become reluctant to lend as they get few rewards for right decisions and face inquiries for wrong decisions. For the truly corrupt officer, the bribe is probably large enough to compensate for any disciplinary action that may take place. The corrupt officer would also probably have enough friends and money to mount a strong defence and thereby ensure a high probability of an acquittal or a mild punishment. It is self evident that when honest officers stop lending and corrupt officers continue to lend, more loans are likely to go bad and the level of non performing assets are likely to increase.

There has been an unwillingness on the part of the government to recognise that an anti corruption drive can be successful only if it is based on the highest standards of natural justice and provides full protection to honest officers. An investigative system in which people are treated as innocent until proved otherwise is the only sensible one however difficult it may make the investigators' task.

It is important to recognise that the very existence of the banks is founded on a sound credit appraisal that allows them to lend to borrowers who are able to borrow from the capital markets only at a high cost. If honest bank officers try to play safe by lending only to top-notch companies, the effect would be an unviable business model because the banks' lending rates to these clients would barely cover their intermediation costs. Lending to less credit worthy customers at rates that reflect the higher risks is the foundation of a healthy banking system.

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[1] SLR (Statutory Liquidity Ratio) securities consist predominantly of government securities.

A continued flight to quality in the banking system coupled with the continuance of directed credit would eventually convert the entire banking system into an instrumentality of government borrowing and priority sector credit. If the governance system of the banks (particularly the public sector banks) today is such that normal risk based lending has become managerially impossible, the time has come to change the governance system. The fundamental problems are with the ownership of the banking system. After a decade of reforms, it is increasingly apparent that the banking system needs to be privatised after a thorough cleaning up of the balance sheet and possible recapitalisation. Until this is done, all the other banking system reforms will remain incomplete.

3.3 Operational Reforms

At the same time as the financial health of the banking system were being tackled, several operational reforms were introduced in the realm of credit policy:

- Detailed regulations relating to Maximum Permissible Bank Finance were abolished
- Consortium regulations were relaxed substantially
- Credit delivery was shifted away from cash credit to loan method. However, the slack season credit policy of 2001 has reversed this shift.

These reforms have helped the efficiency of the financial sector and have also helped develop the money market in India.

These reforms also have the potential to make the banking system more competitive and put pressure on the banks to become more efficient. This potential has not however been fully realised as the regulatory regime continues to be anti-competitive as discussed in 3.6 and 3.7 below.

3.4 Financial Institutions

It could be said that while at the beginning of the reforms, the banking system faced imminent insolvency but the financial institutions were more or less solvent, the roles were completely reversed after a decade of reforms.

Economic reforms deprived the development financial institutions of their access to cheap funding via the statutory pre-emptions from the banking system. They were forced to raise resources at market rates of interest. Concomitantly, the subsidized rates at which they used to lend to industry gave way to market driven rates that reflect the institutions' cost of funds as well as an appropriate credit spread. In the process, institutions have been exposed to competition from the banks who are able to mobilize deposits at lower cost because of their large retail branch network.

The immediate impact of the reforms has been felt on the asset quality of the financial institutions. They have been the victims of sever adverse selection as these institutions have tended to become lenders of last resort to projects that cannot raise finance in the capital markets or from other sources. Moreover, the historical asset base of these institutions exposed them to precisely those sectors of the economy that have been the losers in the reform process – the globally uncompetitive industries that owed their survival to the high degree of protection in the pre-reform era. As a result, the financial institutions have faced mounting levels of non performing assets that could pose a severe threat to their solvency. Responding to these changes, financial institutions have attempted to restructure their businesses and move towards the universal banking model prevalent in continental Europe. It is difficult to say whether this would only replace a weak financial institution with a weak bank.

What is clear is that neither the government nor the regulator appears to be tackling the problems of this sector with the seriousness and urgency that they deserve. Radical reforms are called for in this sector including drastic restructuring, downsizing of the balance sheet, possible recapitalisation and eventual privatisation.

3.5 Insurance

Private sector insurance companies started operating in India in 2000, several years after the first proposal to allow their entry. The Insurance Regulatory and Development Authority (IRDA) has been set up as the apex regulator for this sector. It is still too early to assess the likely impact of the new players. In the first few months, however, the new entrants do appear to have injected greater competition and dynamism into India's insurance industry.

The IRDA has also embarked on a regulatory programme that encourages greater professionalisation and modernisation of this sector. It has taken commendable initiatives for training and certification of insurance agents and for encouraging the development of an actuarial profession. In the past, bright students who were attracted to the actuarial profession by its potential to apply mathematical concepts to real life problems discarded the idea because of the total lack of scope for actuaries in India's nationalised insurance industry.

The major area where insurance reforms have not been sufficiently far reaching is in the area of investment restrictions. Sections 27 and 27A of the Insurance Act place restrictions on investments in shares and corporate bonds. Not only are the quantitative ceilings unnecessarily restrictive, but the qualitative restrictions are not in tune with a modern capital market. For example, the eligibility conditions for corporate debt do not involve the notion of credit rating at all, but depend on quite meaningless backward looking notions of financial soundness.

The key question that remains to be seen is how receptive the regulatory regime would be to financial innovation. The IRDA could play a catalytic and facilitating role here though the restrictive features of the Insurance Act would restrict its freedom.

Of particular importance would be the regulatory stance towards capital market linked insurance products like variable life and universal life policies. The Life Insurance Corporation has introduced a variable life policy called Bima Plus. Unlike in the United States where such products are subject to regulation as mutual funds by the securities regulator also, Bima Plus appears to be regulated only as an insurance product and not as a mutual fund. Whether this would spur innovation or lead to regulatory arbitrage remains to be seen.

3.6 Competition and Efficiency

Early in the reforms process, it was recognised that greater competition and innovation would be required so that the public received better financial services. In its mid term review of the reform process (Ministry of Finance, 1993), the government stated: "Our overall strategy for broader financial sector reform is to make a wide choice of instruments accessible to the public and to producers. ... This requires a regulatory framework which gives reasonable protection to investors without smothering the market with regulations. ... It requires the breaking up of monopolies and promotion of competition in the provision of services to the public."

Unfortunately, this is one area where actual progress has lagged far behind stated intent. It is true that some steps have been taken to increase competition between financial intermediaries both within and across categories. Banks and financial institutions have been allowed to enter each other's territories. Fields like mutual funds, leasing, merchant banking have been thrown open to the banks and their subsidiaries. The private sector has been allowed into fields like banking and mutual funds. Nevertheless, major structural barriers remain:

- All major banks and financial institutions continue to be government owned and government managed.

- The entire mechanism of directed credit and selective credit controls built up over the years is still in place, and is being strengthened in certain areas.

- Financial intermediaries have often been compelled to set up separate arms' length subsidiaries while entering various segments of the financial services industry. This has prevented them from benefiting from economies of scope.

- Competition has also been hindered by the undiminished power of cartels like the Indian Banks Association (IBA). In fact, these cartels have been accorded the tacit support of the regulators. These half hearted attempts at promoting competition raise fears about the extent to which our regulators have succumbed to regulatory capture by the organizations that they are supposed to regulate.

- On the technological front, progress has been slow in important areas. The payment system continues to be primitive despite the central bank's attempts to create an Electronic Fund Transfer System (EFTS). Archaic elements of the telecom regulations have prevented the financial services industry from benefiting from the confluence of communications and computing technologies.

If we imagine a Rip Van Winkle going to sleep in the early 1990s and waking up today, he would not see that much has changed at the grass roots level in the provision of banking services. (The most visible change would be the much greater spread of credit cards – a financial innovation that has little to do with regulatory action).

The extremely slow progress in this area means that the Indian consumer has not seen the benefits of financial sector reforms in the form of better service, better products or better prices. The efficiency gains of financial sector reforms have simply not happened.

3.7 Pro-Bank Tilt of Regulatory Policy

One of the distinctive elements of the financial sector policy is a powerful regulatory protection extended to the banking system. Faced with a financially weak banking system, the policy makers have been unwilling to bite the bullet and recapitalise the predominantly state owned banks to restore their financial health. Instead the policy has been to provide a cosy regulatory regime in which the dominant oligopolistic banks are insulated from competition from new entrants as well as competition from non bank sources of capital. The implicit hope has been that this protected environment will allow them to survive even if they are financially weak.

- The nature and pace of banking sector reforms has been designed to reduce the ability of new banks to take market share away from the incumbents by aggressive competition. I would like to mention in particular the niggardly rate at which new bank licences have been doled out, a licencing policy that effectively excluded most promoters with deep pockets, the extreme restrictions on branch expansion and rationalisation, and ill concealed regulatory hostility to innovation and aggressive marketing. All this meant that the incumbent big banks faced very little threat from new entrants.

- At the same time, potential competition from outside the banking system was ruthlessly destroyed:

  - The development financial institutions that were financially very sound at the beginning of the reform process were not allowed to transform themselves into universal banks until their financial strength had been substantially eroded. This issue is described in more detail in 3.4 above

  - The non bank finance companies (NBFCs) that despite their higher cost of funds competed intensely with the banks on the basis of speed, flexibility and innovation were systematically destroyed in the second half of the nineties. In line with international practices, the NBFCs' access to retail funds was severely curtailed. At the same time, the regulatory regime did not allow the NBFCs to fund themselves effectively in the wholesale markets as they do globally.

  - The very hesitant moves towards capital account convertibility described in 2.2 above have meant that the banks have not had to face cross border competition on the scale that might have been expected in the early 1990s. Moreover restrictions on foreign banks operating in India have made them less of a competitive threat than they might otherwise have been.

  - The regulatory regime for money market mutual funds has been designed to prevent them from competing effectively with the banks.

  - The capital markets have been in a state of decline since the early/mid 1990s for a variety of reasons as described in 5.9 below. However, one of the contributory factors has been a regulatory bias towards the banks and against the capital markets. This has taken several forms including limiting the amount of bank credit to the capital market, unwillingness to allow exchange clearing houses and depositories direct access to the

> payment system, and an ongoing attempt to keep the government securities market a private inter-bank affair. More important than all these however has been the systematic tendency of the central bank to drain liquidity from the capital markets in situations similar to those in which central banks elsewhere in the world tend to flood the market with liquidity. While the US capital markets have benefited from what has been called the "Greenspan put", the Indian markets have been plagued by what may be called the "RBI call". One final point is that while the scams of 1992 and 2001 both originated in the banking system and then the contagion spread to the capital markets, the regulatory response in both cases was to crack down on the capital markets. This smear strategy has certainly worked to the advantage of the banks.

The net result of this extremely supportive regulatory regime has been that the weaknesses of the banking system have been masked. It has been possible to keep the explicit cost to the government of banking sector reform quite low (2% of GDP) while the economy has borne a far greater cost in terms of inefficiency and lack of competition. It would indeed be far better for the nation as a whole that the government incurs a larger direct cost of maybe 5-10% of GDP to clean up the banks thoroughly. It would then be possible to replace the current pro-bank tilt of regulatory policy by a pro-competition tilt. The nation as a whole would surely benefit from a healthier and more competitive banking system.

4 Interest rate deregulation and financial repression

4.1 Deregulation

Perhaps the single most important element of the financial sector reforms has been the deregulation of interest rates.

- Interest rates were freed on corporate bonds, most bank lending, and on all bank term deposits.
- Introduction of auctions coupled with reduced pre-emption led to more market determined interest rates for government securities.
- Administered interest rates in the banking system are now confined mainly to the rate on savings account, and the concessional lending rates for certain sectors like exports and small loans. The interest rates on small savings instruments offered by the government are also administered, and in a sense provide a floor for bank deposit rates. The government is in the process of linking these rates also to market interest rates and inflation rates.

4.2 Financial Repression

For all practical purposes, financial repression is a thing of the past. One crude measure of repression can be got by comparing the inter bank call market rate (which was more or less free market determined even in the 1980s) with the short term bank deposit rate. From 1981-82 to 1992-93, the call rate exceeded the one year bank deposit rate in every single year with a median excess of 1.5%. From 1993-94 to 1999-00, the situation was reversed: the bank deposit rate exceeded the call rate in 5 out of 7 years, and the median excess of the deposit rate over call rate was 1.6%. This suggests that in the 1980s, the bank deposit rate was repressed to the extent of about 3%.

When the prices of financial assets are determined by the free play of market forces, financial markets are able to perform the important function of allocating resources efficiently to the most productive sectors of the economy. To the extent that this has happened in India, this must count as one of the most enduring and decisive successes of the financial reforms.

It must however be added that as discussed elsewhere in this paper, the regulators have a tendency to use several indirect tools (including at times "moral suasion") to influence the direction of the market even after administrative controls have been removed. When this happens, many of the benefits of free financial markets are lost.

5 Capital Markets

The initial burst of economic reforms included a major reform in the capital market – the abolition of capital issues control and the introduction of free pricing of equity issues in 1992. Simultaneously the Securities and Exchange Board of India (SEBI) was set up as the apex regulator of the Indian capital markets.

The last decade has seen several significant reforms in the capital markets. The secondary market in particular was completely transformed by technology and competition. Paradoxically, however, after a decade of reforms, the capital market is less important in the financial system than it was at the beginning of the 1990s. It bears an eerie resemblance to a spanking new shopping mall with the best facilities and infrastructure, but no shoppers in sight. In some ways, the problems are with the real economy. As long as there is vibrancy in the real economy, there is life in the capital markets, but when the real economy itself descends into a spiral of diminishing expectations, it becomes difficult to sustain the vitality of the capital markets. These issues are discussed below.

5.1 Secondary Market Reforms

The secondary markets for stocks witnessed more change and reform than most other components of the financial sector:

- Online trading (the electronic order book) was introduced by the newly set up National Stock Exchange in 1994 and was quickly copied by the other exchanges. The capital market was previously confined to Mumbai (where the largest stock exchange was located) and to a few other centres where smaller exchanges provided poorer execution quality. Within a few years, this gave way to a national market based on satellite communications that abolished geographical barriers. Amongst the benefits were superior liquidity, greater transparency and lower costs.

- The settlement of securities became electronic in the late 1990s. Compulsory dematerialisation was introduced for deliveries in the stock market for institutional investors in 1998 and for retail investors in 1999. Today, practically all the securities settlement in the stock exchanges is in dematerialised form. The benefits have been in the form of faster settlement, lower costs and the elimination of forged and fake shares.

- Rolling settlement on a T+5 cycle was introduced in mid-2001. A decade ago, the settlement was on an erratic fortnightly cycle where settlements were often delayed. The system is still in the process of adapting to the new regime. The settlement period is to be shortened to T+3 in April 2002.

- A derivatives market was established in mid-2000. Initially, this was limited to index futures, but subsequently, index options and individual stock options have been added. This was accompanied by the abolition of the carry forward system that provided limited hedging facilities in the pre-reform era.

- Tighter enforcement of margins and the creation of a central counterparty diminished the risk of settlement failures. In the early 1990s, the long settlement cycle and poor enforcement of margins often led to defaults and settlement failures. In some cases, these defaults also led to the closure of the exchange.

- Internet trading (and mobile trading) have been launched, but are yet to pick up significant volumes. These have the potential to abolish geographical barriers to investors accessing broking services, just as electronic trading abolished geographical barriers to brokers accessing the stock exchange. They have the potential to further reduce costs, promote competition and improve investor service.

A few things still need to be done to complete the modernisation of the stock markets. These include:

- It is necessary to streamline the system of securities lending. A securities lending scheme was introduced in India in 1997. However, to allay the exaggerated fears of the tax authorities about its potential use as an instrument of tax planning, it was hemmed in with excessive restrictions. The result has been that the securities lending activity in India has been highly oligopolistic and ineffective.

- It is necessary to dismantle the short sale restrictions that plague the Indian capital market today. As discussed later in this paper, short sale restrictions are probably the single biggest culprit in recent episodes of alleged market manipulation.

5.2 Primary Market

As already mentioned, the first big bang reform in the capital market was the abolition of capital issue controls and the introduction of free pricing. Some elements of merit based regulation still survived in terms of track record requirements (entry norms) and an invidious distinction between premium and par issues. Over time, however, these have also been whittled down and the capital market regulator has moved almost completely to a disclosure based regime of regulation.

The introduction of the book-building route has led to greater efficiencies in the capital raising process and has contributed to improved price discovery. At the same time vast improvements in the disclosure regime discussed later in this paper have laid the foundation for a more transparent primary market.

There is still an element of dirigisme in the attitude of SEBI towards new financial instruments. It was only recently that SEBI allowed non investment grade bonds to be issued and it even now frowns on instruments like equity index linked bonds.

5.3 Disclosure Standards

Disclosure standards in the primary market have seen a gradual but steady improvement. However, the full benefits of this have not been realised because only a small fraction of investors receive the full prospectus. The current regulations require companies to provide an abridged prospectus to all investors, while the full prospectus is available on demand. In practice the on-demand availability of the full prospectus is geographically limited and is often restricted to the larger more sophisticated investors. Regulators have sought to deal with this problem by requiring more information to be reproduced in the abridged offer document, but this leads to information being crammed in fine print on one huge sheet of paper. It appears that the abridged prospectus has its origins in the era of price controls when issues were often oversubscribed a hundred or even a thousand times. At that time, it could be legitimately argued that it would be prohibitively expensive to provide every applicant with an unabridged prospectus. In today's vastly altered scenario, it should be possible for market intermediaries to ensure that every applicant has received a copy of the complete prospectus accompanied by a complete set of financial statements. It is necessary to move in this direction. One possibility would be a regulation that gives any applicant who has not received the full prospectus the right to withdraw his application at any time before allotment. This would incentives the issuer to ensure delivery of the full prospectus to every applicant.

Even more than in the offer document, it is in the area of continuing disclosures that the greatest progress has been made. Five key accounting standards, which have become effective from April 1, 2001, redress the most glaring inadequacies that existed previously in Indian accounting practices. These include the critical areas of consolidation of accounts of subsidiaries, deferred tax accounting and related party disclosures. There are still a number of areas where Indian accounting standards lag behind international best practices, but these are less important than the ones that have been redressed. Moreover, there is reason to hope that these deficiencies will also be removed over a period of time. At the same time, the accounting scandals surrounding the bankruptcy of Enron Corp in the United States have heightened the sense of urgency of adopting global best practices in accounting standards.

There has also been some progress in requiring companies to make disclosures to the stock exchanges in respect of any material developments like mergers, acquisitions, corporate actions, strategic decisions and other events that have a significant impact on the share price. However, both the content and the timeliness of these disclosures leave much to be desired.

There have been some initiatives to make effective use of information technology in the collection and dissemination of corporate disclosures (Securities and Exchange Board of India, 2000) on the lines of the EDGAR system in the United States. However, these have yet to move beyond the stage of conceptualisation.

5.4 Takeovers

The SEBI regulations on takeover have brought about a transparent regulatory framework for takeovers. However, there have been only a handful of hostile takeover bids in the last several years and most of these hostile bids have been defeated. That this should be so in a period of rising investor dissatisfaction with the governance and performance of the Indian corporate sector is both surprising and distressing. More than the deficiencies in the take over code itself, it is the major weaknesses in the financial sector that have led to this unsatisfactory state of affairs. In particular, the limited availability of leveraged financing in India, the regulatory bias against innovative financial instruments, and the general climate of political hostility to corporate raiders are to blame.

5.5 Institutionalisation

5.5.1 Extent of Institutionalisation

The post reform period has seen the emergence of a large number and variety of institutions in the capital market

- ***Foreign Institutions:*** Foreign Institutional Investors (FIIs) registered with SEBI enjoy a high degree of capital account convertibility in an otherwise closed capital account. FIIs are allowed to buy and sell shares in the stock exchange and repatriate the proceeds freely to their home countries. FIIs, as the name suggests, are institutions like mutual funds, pension funds, banks and insurance companies. However, there is a provision for a corporate or high net worth individual to also avail of the same benefits by coming in as a registered sub account of a registered FII. There are restrictions on the aggregate holding of FIIs in any company. As on December 31, 2001, FIIs had in the aggregate invested $14.5 billion in the Indian market. This would represent about 15% of the market capitalisation, but it must be noted that the figure of $14.5 billion is the cumulative amount of money brought into India and not the current market value of their portfolio. No estimates are available of this portfolio value. However, since the market index has fallen sharply in dollar terms since the early 1990s, there is reason to believe that the FII equity holding would be less than 10% of the market capitalisation.

- ***Mutual Funds:*** In the late 1980s, the mutual fund industry (which till then consisted only of the public sector Unit Trust of India) was thrown open to the public sector banks and financial institutions. In the mid-1990s, private sector mutual funds were permitted. As of September 30, 2001, the mutual fund industry had assets under management of Rs 1.02 trillion. This represents about 20% of the market capitalisation, but since 70% of the mutual fund assets are in schemes that are predominantly debt oriented, and another 17% are in balanced funds, the actual equity holding of the mutual funds probably amounts to only about 5-7% of the market capitalisation. In terms of the competitive structure of the industry, UTI accounted for 50% of assets under management, the private sector funds for 42% and the public sector funds for 8%. In the last couple of years, private sector players have rapidly gained market share from other players.

- ***Development Financial Institutions:*** In the pre-reform era, development financial institutions and public sector insurance companies provided a major component of long term finance for industry. Along with extending loans, these institutions often subscribed to the equity as well. In many cases, the loans were at subsidised rates of interest, but provided for conversion into equity at highly favourable rates. As a result, financial institutions have a significant shareholding in many large Indian companies. Given the historical background of these holdings, the financial institutions have often behaved like strategic investors rather than portfolio investors. There have been repeated suggestions for restructuring of these holdings including secondary market sales, auctions to strategic bidders, and transfer to mutual funds or other special purpose vehicles. There have also been suggestions that they should simply start behaving like portfolio investors. As discussed earlier in this paper, there is a need for a radical restructuring, downsizing and eventual privatisation of these institutions themselves.

- ***Venture Capital Funds:*** SEBI has recently liberalised the regulations for venture capital funds and has also permitted foreign venture capital funds to operate in India. They will have the freedom to invest in unlisted companies with the full freedom to repatriate sale proceeds. These new regulations have been notified only recently and it will be some time before these investors start playing a major role in the capital markets.

- ***Insurance Companies and Pension Funds:*** Private sector insurance companies have started operations only recently. The regulatory framework for pension funds is still under discussion. These institutions have therefore yet to make a impact on the capital market.

5.5.2 Institutional Contribution in Market Development

The contribution of institutional investors to the development and modernisation of our capital markets has been significant, but it has not been as great as one would have expected:

- The institutional investors have played a major role in the professionalisation of the capital markets in India. Their demand for high quality analysis and information has helped spur the growth of these services in India. As little as 10 years ago, beta was unheard of outside academic circles, P/E ratios were regarded as esoteric tools, the financial press was very limited in circulation, and there were no earnings forecasts or other equity analysis. Today, the country boasts of a very vibrant financial press, a very active community of financial analysts, and a high degree of professionalisation of all capital market intermediaries. Much of this has been greatly helped by the growth of institutions that value quality of service more than personal relationships and trust.

- However, the institutions have failed to provide a major impetus to capital market reforms. Both domestic and foreign institutions in India have resisted reforms as vigorously as other market participants. Reforms in India have been pushed forward by academics, by the financial press and by the policy makers (not necessarily in that order). Many of these reforms have had to be pushed through by regulatory fiat even where they were in the long run interests of the institutions themselves. In this sense, institutions have been as myopic in their response to capital market reforms as anybody else. Three examples would illustrate this phenomenon:

    - Before India set up its first depository, institutions were most vociferous in their complaints about the risks and costs of the paper based settlement system. But when the depository started operations, they were most reluctant to start availing of its services until SEBI mandated that a minimum percentage of their holdings must be dematerialised. SEBI had to then go on to mandate that institutions could trade only in dematerialised form. (Later SEBI extended this fiat to all investors trading in stock exchanges).

- Institutions have also generally agreed that a shift from account period settlement to rolling settlement is desirable. However, they did not embrace the optional rolling settlement facility that was available for a long period before SEBI made rolling settlement mandatory.

- The institutions have long complained about the lack of hedging mechanisms in India. However, after the derivatives markets were set up, institutions have been reluctant to trade in it. Most observers believe that the success of the market would depend on its first attracting enough retail interest to entice the institutions into it.

5.5.3 Assured Return Schemes and Mutual Fund Solvency

A mutual fund is one of the institutions that, in theory, requires almost no risk capital (Merton and Perold, 1993). However, in India many mutual funds, particularly in the public sector operated schemes that guaranteed a minimum return. These were like bank deposits sweetened with a call option on the stock market, but many mutual funds failed to recognise the risks involved in these products. When the portfolios of these schemes did badly (partly due to poor management and partly due to the lacklustre performance of the market itself), the mutual funds had great difficulty in fulfilling their return guarantees. Under pressure from SEBI, the public sector banks and insurance companies that had sponsored these mutual funds provided financial support of nearly Rs 20 billion to the mutual funds to allow them to honour the guarantees. Of these seven mutual funds, one needed a support of Rs 12 billion, three needed about Rs 2 billion each, and three needed relatively small amounts[2].

5.5.4 The Problems of Unit Trust of India

The biggest problem however was in the case of the largest and oldest mutual fund, the Unit Trust of India. The oldest of its schemes, US64, had over a period of time developed into a queer animal. It was an open-end scheme, but did not link its repurchase and resale prices to Net Asset Values (NAV). In fact, it did not report NAVs at all. For several years, repurchase and resale prices had been held fairly steady while the fund paid out attractive annual dividends. By the early 1990s, many institutional and retail investors had come to perceive US64 as an attractive fixed income investment though the majority of its investments were actually in equities. Because of its liquid secondary market, many even regarded it as a money market instrument. This was fine as long as US64's NAV was significantly above its repurchase and resale value. This excess provided a safety cushion to absorb market fluctuations.

[2] The SEBI Annual Report 1999-2000, Table 2.39 provides details of these funds and their schemes.

In the mid-1990s, however, it became clear to careful observers that this safety cushion was being eroded and that the scheme was exposed to a high degree of market risk. It was only in 1998 that UTI itself announced that it had a large deficit in US64; not only was the NAV below the resale price, it was below even par value. A run on the fund appeared likely as investors prepared to exit before the resale price was lowered to bring it in line with NAV. At this stage, the government undertook a bail out in which it paid UTI Rs 33 billion (the book value) for securities that had a market value of only Rs 15 billion. It was also decided to make the scheme NAV based over three years.

In mid 2001, a sharp drop in the Indian market pushed US64 into a large deficit again, but the government now indicated its unwillingness to bail out the institution. The fund then took the drastic step of suspending repurchase and resale of units under the scheme. At the same time, it opened a special liquidity package allowing any investor to redeem up to 3000 units at fixed pre-announced rates starting at Rs 10 for August 2001 and going up to Rs 12 in May 2003. In January 2002, the scheme reopened for fresh subscription as an NAV based scheme where both purchases and sales are at NAV linked prices. At the same time for old investors, the government offered some relief. First, the facility of redemption at pre-announced rates ranging from Rs 10 to Rs 12 was extended from 3000 units to 5000 units. Second and more important, for holdings above 5000 units, UTI assured a repurchase price of Rs. 10 per unit, or NAV, whichever is higher on May 31, 2003. This assurance was backed by the Government which agreed that in the event of NAV in May 2003 being lower than the guaranteed repurchase price, it would compensate UTI for the difference. Thus after six months of vacillation, the UTI was bailed out by the taxpayer for the second time in four years.

The distinguishing feature of the Unit Trust of India is that it is *not* government owned. The government controls the organisation without owning it. The initial capital of UTI consisted of Rs 50 million of subscription by government institutions to US64 in 1964. This initial capital is not a separate share capital but is merely a part of US64 and even in early years, it was only a small part of US64. Thus the government was just the first of the millions of investors in US64. All the fixed assets[3] including the land and buildings of UTI have been bought out of the funds of US64 and are shown as assets of US64. In this sense, the true owners of UTI are the US64 unitholders and the government controls the organisation only by virtue of the UTI Act and not by virtue of ownership.

The logical solution to the problems that UTI found itself in would therefore have been for the government to withdraw from the scene by returning UTI to its rightful and legitimate owners – the holders of US64. These owners would then have had the right to decide for themselves how their funds should be managed. The simplest way to achieve this demutualisation would have been for UTI to transfer all its buildings and other asset management related assets from US64 to a new company and to spin this company off to the US64 unit holders. The new company would have become the Asset Management Company (AMC) for all UTI schemes. The UTI Act could then have been repealed and UTI could have been brought under the SEBI Mutual Fund Regulations.

[3] These fixed assets have a book value of Rs 8.5 billion (Malegam, 2001).

The US64 holders should have been allowed to do what they pleased with the shares that they would have received in the newly created AMC. They could sell them to anybody they choose or they could hold on to them. It was possible that a large domestic or foreign financial institution would have launched a tender offer for these shares to take control of the new AMC. They should be have been allowed to do so with no restrictions other than that imposed by the SEBI Takeover Regulations.

As a rule of thumb, an AMC is valued at 2-3% of assets under management. This would suggest that the new AMC would have been worth about Rs 10-15 billion. The large distribution network, valuable real estate and other fixed assets would probably have added several billion more to the valuation. Thus the shares in the AMC would have gone some way to compensating the US64 holders for the losses that they have suffered under government management. It would also have established the principle that the owners have the right to replace any management that performs badly even if that management is the government itself. Had this solution been adopted in mid 2001 (or even better immediately after the 1998 bailout), it would have avoided using taxpayer money to bail out the investors of US 64 in 2002/2003.

5.6 Market Manipulation

The 1990s have seen a number of episodes of alleged market manipulation in the equities market. Shah and Thomas (2001) identify eight significant episodes of alleged market manipulation during the 1990s in the Indian stock markets. There can be some difference of opinion on how many major market manipulation episodes have taken place because there is a tendency among Indian policy makers to regard a large price swing as market manipulation even if it is only a speculative bubble or even if it is justified by fundamentals. Nevertheless, there is no denying that many of the episodes enumerated by Shah and Thomas do provide cause for concern.

In my view, the single most important culprit for the frequency and severity of such episodes is the strong restrictions on short selling that exist in India. All institutions (including banks, financial institutions, mutual funds and foreign institutional investors) are prohibited from short selling in the Indian capital market. This restriction has been in place for a long time, but the restriction has become more serious with the progressive institutionalisation of the capital market in the 1990s. Over a period of time, therefore, an increasingly large and important segment of the market has been precluded from short selling. Moreover, at various critical junctures (most recently in March 2001), the regulators have moved to impose a total ban on short selling by all investors.

To understand why short selling restrictions are so important, we must first note that almost all the episodes enumerated by Shah and Thomas involve alleged attempts by the companies and their promoters to rig up the share prices of their own companies. In a free market, the most powerful weapon against such attempts would be aggressive short selling by rational investors. In the presence of short sale restrictions, however, the best that rational investors can do is to sell all their holdings. Once they have done so, they make no further contribution to price discovery. Market prices are then determined by the alleged manipulators and less rational investors (momentum investors and passive /indexed investors). It now becomes evident that short sale restrictions constitute an open invitation to promoters and managements to rig up the share prices of their own companies. Perhaps inadvertently, the regulatory regime has come to fulfil the fondest dream of these market manipulators.

Even if it were argued that some of these episodes are non-manipulative market crashes, short sale restrictions would be an important explanation for their number and severity. Recent studies in the United States (Hong and Stein, 2001) argue that short sale restrictions in that country are responsible for the high frequency of market crashes there. The mechanism is the same as that described above – short sale restrictions prevent rational bearish investors from contributing to price discovery in the build up to the crash. These studies are all the more important because part of the justification for short sale restrictions in India is derived from the fact that the United States has similar restrictions. It is often forgotten that the United States introduced these restrictions as a misguided knee jerk reaction to the great depression, and has merely persisted with that mistake. More importantly, if our markets are more susceptible to market manipulations than the US market, we should move more aggressively to remove these restrictions and pro-actively facilitate short selling.

In the United States itself, the scandals surrounding the bankruptcy of Enron have tarnished the reputations of the Securities and Exchange Commission (SEC), the Financial Accounting Standards Board (FASB), the auditors, the rating agencies, the analysts, the boards, the financial press and almost every other element of the regulatory regime. The one group that has come out with flying colours is the lowly short seller who kept pointing at the skeletons in Enron's cupboard when everybody else was intent on turning the other way. It is now apparent that even the United States would therefore benefit from relying on the market forces represented by the short sellers to police its markets.

Another important factor is the unwillingness of the stock exchanges and the regulators to embrace modern software tools for market surveillance and investigation. Despite a long-standing effort to implement stock watch systems, the stock exchanges have yet to make these systems fully effective. Most of the investigations into alleged market irregularities also fail to embrace the tools of information technology. There is a large pool of software talent in the country that could develop modern neural network and artificial intelligence tools that could leapfrog the best in the world. This has not happened.

There has been a tendency to imitate the US model of market surveillance without recognising that within the US itself, there is considerable disquiet about the model. This was true even before the Enron scandal. As Oesterle (2000) points out in an incisive analysis:

> "Although the U.S. securities markets are the world's largest and most liquid, it does not follow that the regulatory system has been an unqualified success. Strong economic fundamentals have created and sustained financial markets, not NYSE policing of its floor traders. … A fairer assessment is that the SRO regime has proved to be barely adequate at best. … During quiet periods, the SEC largely relies on SROs to police trading floors, and it routinely approves SRO rules and disciplinary decisions. In other words, the SEC during such periods tends to be lazy and complacent. When a scandal breaks in a trading market, there is embarrassment and handwringing over why the exchange involved was not more vigilant in disciplining its members. The exchange contritely proposes minor rule modifications, often at the SEC's insistence, leaving the exchange's functions and membership largely intact. The SEC approves the changes and,

> with some fanfare, the regulators and the regulated hail the virtues of the SRO system—until the next scandal. In recent years the SEC has not been able to resist the temptation to tinker too much with the rules of the exchanges. But the illusion that the SEC is guaranteeing the integrity of exchanges removes an incentive for the exchanges themselves to exercise diligence, lest they lose their customers. And customers are lulled into a false sense of security, believing the SEC is closely policing the day-to-day activities of the exchanges."

There is a need to rethink the entire dirigiste model of regulatory surveillance and rely more on countervailing power in the market place. Abolition of short sale restrictions is one way of bringing countervailing power to bear. Another important step is greater transparency and disclosure. Using modern artificial intelligence methods it should be possible for the trading system to automatically generate alerts about suspicious trading patterns and price/volume trends. Rather than feed these alerts to a set of error-prone human surveillance officials (with potentially perverse incentives), these alerts should be publicly disseminated. By doing so, the information is placed in the hands of those who have every incentive to take corrective actions. If an automated surveillance alert indicates possible bear manipulation, the bulls are immediately forewarned to protect their own interests. These forewarned investors become a countervailing power to the power of the would-be manipulators. Such an approach would reduce the role of human discretion and replace this discretion by the impersonal logic of computing systems and free markets. This approach would also reduce the agency costs associated with the regulatory approach. I would argue that India with its abundant software talent is uniquely positioned to lead the world in such a process of development.

5.7 Regulation of Listed Companies and Investor Protection

Regulation of listed companies has been a major area of weakness in the Indian regulatory system. The legacy of regional stock exchanges is a major reason for this. The legal framework requires companies to be listed on the regional stock exchange closest to their location. After the advent of electronic trading in the mid-1990s, most of these regional exchanges have become defunct for all practical purposes. There are some exchanges where it is reported that there is nobody even to answer the phone. Yet these exchanges continue to be the front line regulator for the companies for which they are the primary listing. The problem has been somewhat ameliorated by the fact that India's second largest exchange (the BSE) is the primary exchange of listing for a large number of important companies. However, the competitive dynamics of the securities trading industry is such that a shift of market share away form the BSE to its larger competitor (the NSE) is quite plausible (Varma 2001).

In this situation, the entire framework of listing regulation needs urgent reconsideration. The time has come to consider the establishment of a National Listing Authority on the lines of the similar entity in the United Kingdom.

Apart from the organisational issue, it is also necessary to strengthen the statutory basis for regulation of listed companies. Unfortunately, this debate has been cast in terms of empowering the regulators and has led to a dispute of jurisdiction between SEBI and the Company Law Department. I think the real task is that of empowering the shareholders and other investors. We need to put aside the dirigiste notion that the state is the answer to all problems of corporate governance. The goal should be to create a statutory framework under which violation of any SEBI regulation or listing requirement gives the investor the statutory right to sue the company and its management. The United States has used the mechanism of class action law suits to provide more effective investor protection than what any regulator could provide. We could try to replicate that model here or we could try to adapt the PIL (public interest litigation) mechanism that the Indian judiciary has used very effectively. Investors are using the PIL route even today, but only to compel the regulators to take action. What is needed is a statutory sanction for a process in which investors can enforce their rights against companies without the intervention of the regulators at all.

5.8 Emerging Threat of Monopolies

Since the mid-1990s, investors and regulators have benefited from a high degree of competition in the Indian securities industry. Even more than all the policy changes that have taken place, it is technology and competition that have transformed the Indian capital market in the last 7-8 years. If we are unable to maintain this competitive structure of the securities industry, we will lose the single most important driver of capital market modernisation in this country. There is now considerable evidence that critical elements of the Indian securities industry are becoming significantly less competitive than in the past (Varma 2001).

5.8.1 Derivative Markets

In the course of just three months from February 2001 to April 2001, the derivatives market was transformed from a competitive duopoly to an effective monopoly. The BSE's market share was effectively wiped out in this short period. This was an awesome reminder of a well known fact: once an exchange's trading volume drops below a critical mass, a vicious circle ensues in which falling liquidity drives traders away causing liquidity to fall further. The speed with which this happens can take everybody by surprise. More importantly, clawing back lost market share is very difficult. In August 2001, the BSE attempted to re-establish its derivatives market by effectively charging a negative transaction fee. The attempt failed.

5.8.2 Equity Markets

Indian equity markets witnessed a similar shift of market share from BSE to NSE during 1994-95. The newly started NSE took market share away from the established market leader to become the largest exchange in India. The vicious circle of falling liquidity should in normal circumstances have led to the NSE then taking the market away completely from the BSE. This did not happen for two reasons:

- BSE quickly adopted the electronic trading model introduced by the NSE.

- The differing trading/settlement cycles of the two exchanges meant that the product offerings of the two exchanges were not perfect substitutes. (From July 2001, the regime of differing settlement cycles has been done away with. This factor no longer operates).

Since early 2000, the market share of BSE in the combined trading volume of BSE and NSE has been falling steadily from near parity to 36% in December 2001. The BSE's market share is today probably at the borderline of the critical level where the vicious circle of falling liquidity begins to operate. The new regulatory regime that began in July 2001 makes stock markets far more intensely competitive than they were earlier. In this environment, a situation where two exchanges have comparable market shares is not a very stable one. Both exchanges have every incentive to try and push the other below the critical level at which it ceases to be viable. Competitiveness is therefore a moving target that requires a proactive management with the ability to respond swiftly to competitive threats and opportunities. It is at this juncture that the BSE finds itself in a situation where there is a governance vacuum. The old mutual governance structure has been swept away, but the promised demutualised governance is not yet in place. In this situation, the ability of the exchange to fight an intense competitive battle and survive is open to doubt. The possibility that the NSE's success in the derivative market could be replicated in the equity market is therefore a very real one.

5.8.3 Depositories

For the last few years, the market for depositories has been a contestable market struggling to become a competitive market. It is now becoming apparent that the second depository (CDSL) is at best a niche player and at worst a failure. The first depository (NSDL) has become an effective monopoly. The Depositories Act clearly envisages a competitive industry structure and provided for a regulatory regime in which the depository was not subjected to price regulation or minimum performance standards. From a theoretical point of view, this regulatory vacuum can be defended only on the ground that the market is highly contestable.

For a couple of years after its inception, the market did appear contestable as CDSL waged a price war with NSDL and pursued market share aggressively. Even at the peak of its apparent success, however, what CDSL appeared to be doing was to target a niche market of active traders while leaving NSDL with an effective monopoly over most of the depository business. For reasons that are not fully clear, even this niche model appears to have got into serious trouble in the second half of 2001, but that is not very important. The central argument here is that even in the best of times, CDSL was only a niche player and the depositories business was an effective monopoly.

Is the depository market even contestable? There appear to be significant switching costs for most investors to change their depository participant or depository. More importantly, the regulatory regime has unwittingly created large entry barriers. The key barrier is that the issuer company has to enter into an agreement with the depository and establish electronic connectivity with the depository before that depository can offer dematerialisation services in relation to that issuer. Another key barrier is that the software systems of the existing depositories are not designed with open interfaces to allow any new depository to establish connectivity with them easily and automatically.

5.8.4 Fostering Competition

Reduced competition would remove one of the most powerful positive forces in the Indian capital market. The force that has made our capital markets more investor friendly and provided cost and efficiency gains in the last decade would no longer be available. It is possible that much of what has been achieved in the last few years would be reversed, as monopolies become progressively unresponsive to investor needs.

Given the limited possibility of effective regulation of monopolies in the securities industry, the regulatory initiatives to foster competition are extremely important.

Global experience suggests that securities trading is a highly contestable and competitive business (Beny and Jackson, 1999). Fostering competition in this area should be relatively easy (Biglari and Hunt, 2000). What is required is the willingness on the part of the regulator to license new stock exchanges with varying governance structures and market designs. For example, active encouragement to ECNs could be one way to maintain competition in the stock market.

Similarly, regulatory provisions that artificially preserve monopolies should be scrapped quickly. For example, section 13 of the Securities Contract Regulation Act prohibits two persons from entering into securities contracts (other than spot delivery contracts) except through a stock exchange. This section confers totally unwarranted and unjustified monopoly privileges on a stock exchange, and therefore, it needs to be repealed as soon as possible. It is interesting to note that while similar restrictions exist both in the United States and in the United Kingdom, these provisions serve an anti-competitive function there too. In the UK, this prohibition was introduced only after the end of the Second World War and was clearly seen by all concerned as a "reward" for the support that the London Stock Exchange had extended to the war effort. Similarly, in the US, it is now clearly recognised that the prohibition is a protectionist measure whose primary purpose today is to insulate American stock exchanges from foreign competition. In both cases, the "political economy" of this prohibition involves extraneous reasons quite unrelated to investor protection.

Similarly, the by-laws of the stock exchanges must be perused carefully to identify and repeal those that are anti-competitive in nature. Oesterle (2000) provides a good description of how self-regulatory organisations (SROs) use their by-laws to stifle competition.

The depository business on the other hand is significantly less competitive globally and is perhaps not highly contestable either. Nevertheless, I believe that regulatory interventions could make this business sufficiently contestable. But for this to happen our regulators would have to go beyond what regulators have done globally. The key is to reduce switching costs for investors and depository participants and to ensure fast and easy inter-connectivity for a potential new depository. The crucial hurdles here are at the software end, and I believe that the regulators would have to extend their oversight to software source code to make this happen. The source code[4] for the key interfaces of the depository must be regarded as part of its by-laws and subjected to the same level of public scrutiny and regulatory oversight.

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[4] It might be objected that this would require the depositories to give up their intellectual property in the software created by them. This is not necessarily so. With modern object oriented methodologies, it is possible to hide the actual implementation of most of the software while exposing all the important interfaces to public scrutiny. It should be possible to subject these interfaces to regulatory oversight without compromising the intellectual property of the bulk of the software. While I make no attempt to hide my personal commitment to open source software, the proposal being made here does not require the regulator or the regulatee to embrace the open source movement.

Indeed this must happen not just for depositories but for stock exchanges and other similar organisations that constitute the infrastructure of the capital markets.

The ultimate source of competition to the Indian securities industry would be from outside the country. As and when the country becomes more open on the capital account, incumbent monopolies would face intense competition from global exchanges as well as clearing and settlement agencies. However, it is imprudent to rely only on this source of competition. First, on current indications, an open capital account appears to be a distant destination despite the mention that it finds in the Finance Minister budget speech for 2002-03. Second, a highly competitive domestic industry would be more likely to withstand global competition when it does arrive (Porter, 1990). To tolerate monopolies today would be to risk the complete domination of the Indian securities industry by foreign players when do we open our markets to global competition.

5.9 Status of the Capital Markets

In the early years of the reforms, the Indian capital markets continued to display the growth and vibrancy that have been present since the mid-1980s. However, this soon petered out, and the capital markets ended a decade of reforms at a lower level on most dimensions than at the start of the reforms. In retrospect, it is evident that the eight years beginning 1984 was the golden age of the Indian capital market (see charts 1, 2, 3, 4, 5, 6).

- During the period from January 1984 to October 1992[5], the market delivered a compounded annual return of about 32% in rupee terms (the market index went up more than 11 times) and 16% in dollar terms (the dollar adjusted index went up nearly 4 times). By contrast, during the two decades from 1965[6] to 1984 the market had delivered a compounded annual return of less than 6% in rupee terms and less than 1% in dollar terms[7].

- A major contribution to the stellar performance of the stock market during the golden years came from a sharp rise in the price-earnings ratio. From a level of around 6-7 in the

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[5] This date is chosen to eliminate the effect of the securities scam that inflated stock prices during late 1991 and early 1992. By October 1992, the scam related price increases had been fully reversed and the market prices are untainted by the scam. Choosing a date in early 1992 (at the height of the scam) would show even more spectacular returns than that reported in the text.

[6] The starting point of 1965 is chosen to make the comparison quite generous. After the war with China in 1962, the market index fell sharply in 1963. If we choose a date in the early 1960s as the starting point, the returns for the period up to the mid 1980s would be even lower than stated in the text.

[7] Adjusting for dividends would increase this meagre return significantly but would not change the qualitative picture. Most studies during this period show that stocks performed very badly during this period (see for example Gupta, 1981).

early 1980s, the P/E ratio doubled in the second half of the 1980s and doubled again in the next couple of years.

- As a consequence of this explosive growth, a number of investors were attracted to the capital market. The capital market that used to attract only about 3% of household financial savings in the 1970s and early 1980s absorbed 10% of household financial savings by the end of the 1980s. This figure rose to a whopping 23% in 1991-92.

- The capital market also became a major source of financing for the corporate sector. Money raised in the capital markets accounted for only 1% of gross fixed capital formation in the economy in the 1970s and early 1980s. This figure rose to 6% by 1990 and peaked at 13% in 1993-94.

- Rising prices and large new flotations (including limited partial privatisation of some public sector enterprises) raised the market capitalisation to nearly 50% of GDP in the early and mid-1990s as compared to less than 20% at the beginning of the 1990s.

Most of this growth stopped or reversed in the later half of the 1990s:

- At the end of February 2002, the market index in rupee terms was only about 7% above the post scam levels of October 1992. The average market index during the first eleven months of 2001-02 was almost exactly the same as in October 1992. This means zero return in rupee terms in about 9 years. In dollar terms, the average index in the first eleven months of 2001-02 was less than half of what it was in October 1992. A foreign investor investing in Indian stocks just as the country was opening up to foreign capital would have lost half his capital.

- The poor performance of the stock market during the post reform period is due principally to a sharp fall in the price-earnings ratio. In the last couple of years, the P/E ratio has halved from the levels of around 30 reached in the early years of the reforms. The P/E ratio is now back to pre-reform (late 1980s) levels.

- The share of household financial savings flowing into the capital market (which had reached 23% in 1992) fell back to about 5% by the late 1990s. This is approximately the same level as in the early 1980s, and sharply lower than in the late 1980s and early 1990s.

- Capital raised in the primary market as a percentage of Gross Fixed Capital Formation in the economy (which reached 13% in 1993-94) fell back to about 2% by the end of the decade. This is about the same level as in the mid-1980s.

- The market capitalisation in absolute rupee terms stagnated in the second half of the 1990s (except for a spectacular but transient surge during the technology stock boom of 1999 and 2000). As a percentage of GDP, the market capitalisation fell to below 30% by the end of 2000-01 (and to about 25% by the end of 2001). This means that market capitalisation relative to GDP is not significantly higher today than before the reforms.

The only quantitative dimension on which the stock market appears better today than at the beginning of the reforms process is trading volume. Trading volume was only about 25% of market capitalisation throughout the first half of the 1990s. This figure surged to over 150% by the end of the 1990s, and in 2000-01 it reached a spectacular figure of over 400%, propelled in part by the boom in technology stocks. In 2001-02, trading volumes fell sharply from the stratospheric levels seen in 2000-01, but recovered in subsequent months as the markets gradually adapted to the structural changes in the market. During the first nine months of 2001-02, trading volumes averaged about 140%, which is about the same as the levels prior to 2000-01.

All this is not to suggest that economic reforms have been bad for the Indian capital market. Quite the opposite is true. India is a good example of Paul Krugman's thesis that "the financial markets offered an immediate, generous advance on the presumed payoff" from economic reforms (Krugman, 1995). Financial markets believe that reforms would pay off in the long run and are therefore willing to provide lavish rewards for economic reform in the belief that a wave of reform is unstoppable. Stock markets thus tend to reward reformers long before they have completed their job. Markets are forward looking and share prices respond to respond to expectations of future reforms. In the Indian case, these expectations turned out to be somewhat premature. The market responded enthusiastically to the first whiff of liberalisation in the mid-1980s, and even more euphorically to the major reforms of 1991. The rise in prices in this period reflected not merely the reforms that had been put in place, but also those that were expected to follow in logical progression. As reforms stalled after the securities scam of 1992, the markets performed badly. Looked at this way, the golden age of the Indian capital market during 1984-92 were simply the period in which reforms were actually taking place and were expected to continue. The stagnation since then reflects the slowing down and reversal of the reform process since then.

5.10Monetary policy and debt markets

In the early nineties, the Indian debt market was best described as a dead market. Financial repression and over-regulation were responsible for this situation (Barua et al., 1994). Reforms have eliminated financial repression and created the pre-conditions for the development of an active debt market:

- The government reduced its pre-emption of bank funds and moved to market determined interest rates on its borrowings. Simultaneously, substantial deregulation of interest rates took place as described earlier.

- Automatic monetization of the government's deficit by the central bank was limited and then eliminated by abolishing the system of *ad hoc* treasury bills.

Several operational measures were also taken to develop the debt market, especially the market for government securities:

- withdrawal of tax deduction at source on interest from government securities and provision of tax benefits to individuals investing in them

- introduction of indexed bonds where the principal repayment would be indexed to the inflation rate.

- setting up of a system of primary dealers and satellite dealers for trading in government securities
- permission to banks to retail government securities
- opening up of the Indian debt market including government securities to Foreign Institutional Investors.

With all these measures, most of the institutional structure for the growth of the money market is now in place. Primary dealers, satellite dealers, rating agencies, transparent trading facilities, gilt mutual funds and a host of other institutional initiatives have created the pre-conditions for a deep and vibrant money market. Despite all this, a series of policy shocks during the l990s stalled the development of the money market until the end of the decade:

- The securities scam of 1992 was the first major shock to the money market. This scam centred upon repo transactions[8] in the government securities market. The repo is one of the safest and most important instruments in any money market anywhere in the world. Unfortunately, the regulatory response to the scam was a ban on repos in the government securities market in India.. Liquidity in the government securities market virtually dried up, and recovered only gradually as the ban on repos was relaxed over a period of several years.

- Just as the market was coming out of the stupor following the scam, the busy season credit policy of 1995 played havoc with the money markets. In 1995, the RBI (possibly under pressure from the government) decided to use monetary policy to stamp out the inflation that was raising its head. The sharp monetary squeeze lasted only half a year before it was substantially eased in the slack season policy of 1996[9]. But in February and March 1996, interest rates went through the roof, and top rated companies and institutions had difficulty raising funds even for short maturities. Borrowers who were below the top rung found the money market effectively closed to them. A number of defaults (euphemistically described as rollovers) took place during this period. The hard blow to the money market was exacerbated by the way in which the central bank chose to conduct the management of the public debt. The sharp monetary squeeze (which the market expected to be temporary) had led to a strongly inverted yield curve in the free market. This posed a problem for the periodic auction of T-bills. Left to the free market, cut off

[8] Repo stands for repurchase agreement, and is a transaction in which an entity sells securities spot with an agreement to buy it back a few days later at a pre-specified price. This is tantamount to borrowing against a pledge of these securities. At the time of the scam, the repo was known as a ready forward transaction.

[9] Like Paul Volcker's brutal war on inflation in the United States in 1979, the monetary squeeze was short-lived but quite effective in taming inflation. Average inflation rates halved from over 10% in the first half of the 1990s to around 5% in the second half of the 1990s. Unfortunately, as in Volcker's America, the impact on the financial markets was quite devastating.

yields on these T-bills would have surged to unacceptable levels. At some of these auctions, therefore, the RBI rejected all competitive bids, accepted the non-competitive bids at the cut-off rate determined by it and let the rest of the T-bills devolve on itself. (Some entities are allowed to bid only on a non-competitive basis where they have to accept the cut-off yield). The unintended consequence of this was that the market for floating rate instruments (tied to the T-bill rate) was virtually destroyed. As short-term rates in the free market rose above 20% and T-bill cut-off rates were kept around 10%, floating rate bonds started sinking. The market was wiped out and some intermediaries who performed market making in these instruments suffered heavy losses as well.

- After recovering from the shocks of 1995-96 the money market were perhaps ready to take off when the Indian rupee came under downward pressure in the wake of the Asian crisis around August 1997. The government at this point decided to defend the rupee though some influential economists argued that a depreciation of the currency would improve our global competitiveness. The government's decision was based on the belief that a sharp fall in the rupee would weaken international confidence in the country. Since the government wanted to conserve its foreign exchange reserves, interest rates became the principal weapon for defending the rupee. On several occasions in 1997 and 1998, the Reserve Bank squeezed liquidity sharply to bolster the currency. The most dramatic of these episodes was in the middle of January 1998: T-bill yields more than doubled, and some prominent money market institutions lost more money on that single day than they had made in the whole year. Episodes like this were repeated throughout the year. After India conducted nuclear tests at Pokharan in May 1998, the RBI was forced to tighten liquidity once again to prevent a slide in the currency. Again in August 1998, just as the Resurgent India Bonds were being launched, the rupee came under renewed pressure, and the RBI had to suck liquidity out of the system very sharply. Between August 1997 and August 1998, the Indian yield curve inverted and disinverted three or four times. All this turbulence took a severe toll on the money markets and the institutions that operate in it.

After August 1998, the money markets enjoyed a period of relative calm. Since then, there has been a sharp rise in the liquidity in money markets instruments and government securities. The turnover in the wholesale debt market of the NSE rose from about 25% of market capitalisation to over 100% of market capitalisation (see Chart 8). Short-term interest rate benchmarks like NSE MIBOR established themselves and a well defined yield curve began to emerge. Primary dealers and fixed income mutual funds brought a set of active traders into the markets. By 2001, the money markets and government securities markets were more liquid than they had been at any time since the scam of 1992.

There is still a long way to go but India is perhaps closer to the development of a vibrant debt market than ever before. To my mind, the fundamental task now is that of regulatory mindset. It appears to me that the regulator in the pursuit of its policy goals has often tended to act against the market rather than through the market. It has tended to fight the market rather than guide it along the desired path. It has tended to use market distorting interventions rather than market oriented ones. The money market is the arena where the full force of the central bank's monetary policy is felt, and the manner in which the central bank conducts its monetary policy is therefore of great importance. I believe that the regulator should have greater confidence in the efficacy of the price signal in free functioning markets, and should place a little more emphasis on the maintenance of orderly markets. It would then be able to achieve most of its policy objectives without sacrificing the growth and development of the money markets.

Finally, a vibrant corporate debt market cannot emerge until major legal reforms are accomplished in areas like bankruptcy, foreclosure laws, and stamp duties.

6 Impact on the corporate sector

6.1 Scope of Corporate Finance

Before the reforms, corporate financial management in India was a relatively drab and placid activity. There were not many important financial decisions to be made for the simple reason that firms were given very little freedom in the choice of key financial policies. The government regulated the price at which firms could issue equity, the rate of interest that they could offer on their bonds, and the debt equity ratio that was permissible in different industries. Moreover, most of the debt and a significant part of the equity was provided by public sector institutions.

Working capital management was even more constrained with detailed regulations on how much inventory the firms could carry or how much credit they could give to their customers. Working capital was financed almost entirely by banks at interest rates laid down by the central bank. The idea that the interest rate should be related to the creditworthiness of the borrower was still heretical. Even the quantum of working capital finance was related more to the credit need of the borrower than to creditworthiness on the principle that bank credit should be used only for productive purposes. What is more, the mandatory consortium arrangements regulating bank credit ensured that it was not easy for large firms to change their banks or vice versa.

Firms did not even have to worry about the deployment of surplus cash. Bank credit was provided in the form of an overdraft (or cash credit as it was called) on which interest was calculated on daily balances. This meant that even an overnight cash surplus could be parked in the overdraft account where it could earn (or rather save) interest at the firm’s borrowing rate. Effectively, firms could push their cash management problems to their banks.

Volatility was not something that most finance managers worried about or needed to. The exchange rate of the rupee changed predictably and almost imperceptibly. Administered interest rates were changed infrequently and the changes too were usually quite small. More worrisome were the regulatory changes that could alter the quantum of credit or the purposes for which credit could be given.

In that era, financial genius consisted largely of finding one’s way through the regulatory maze, exploiting loopholes wherever they existed and above all cultivating relationships with those officials in the banks and institutions who had some discretionary powers.

The last decade of financial reforms have changed all this beyond recognition. Corporate finance managers today have to choose from an array of complex financial instruments; they can now price them more or less freely; and they have access (albeit limited) to global capital markets. On the other hand, they now have to deal with a whole new breed of aggressive financial intermediaries and institutional investors; they are exposed to the volatility of interest rates and exchange rates; they have to agonize over capital structure decisions and worry about their credit ratings. If they make mistakes, they face retribution from an increasingly competitive financial marketplace, and the retribution is often swift and brutal.

Broadly the corporate sector has felt the impact of financial sector reforms has been felt in the following key areas:

6.2 Corporate governance

In the mid nineties, corporate governance became an important area of concern for regulators, industrialists and investors alike. Indian industry considered the matter important enough for them to propose a model corporate governance code (Bajaj, 1997). SEBI introduced a mandatory governance code based on the recommendations of the Birla Committee (Securities and Exchange Board of India, 1999). However, the major pressure for better corporate governance came from the capital markets (Varma, 1997). The decade since the beginning of reforms have witnessed a silent revolution in Indian corporate governance where managements have woken up to the disciplining power of capital markets. In response to this power, the more progressive companies are voluntarily accepting tougher accounting standards and more stringent disclosure norms than are mandated by law. They are also adopting more healthy governance practices.

6.3 Risk management

The deregulation of interest rates as a part of financial sector reform made interest rates highly volatile. Companies have tried to protect themselves from this risk by introducing a call provision in their bonds by which they can redeem the bonds prematurely under certain conditions. Of course, such call options make the bonds more expensive (in terms of a higher coupon rate) or more difficult to sell. Companies have also tried to make the bonds more attractive to investors by giving them a put option to seek premature redemption of the bonds. This may make the bond easier to sell, but it exposes the issuing company to interest rate risk. In the post reform era, corporates have also been faced with high volatility in foreign exchange rates. The rupee-dollar rate has on several occasions moved up or down by several percentage points in a single day as compared to the gradual, predictable changes of the eighties. Indian companies have found to their dismay that foreign currency borrowings which looked very cheap because of a low coupon rate of interest can suddenly become very expensive if the rupee depreciates against the currency in which the bond is denominated.

6.4 Capital structure

At the beginning of the reform process, the Indian corporate sector found itself significantly over-levered. This was because of the availability of subsidised institutional finance and the lower operating (business) risks in a protected economy. As the corporate sector was exposed to international competition and high real interest rates, Indian companies undertook substantial deleveraging in the mid-1990s. But for a flagging equity market since the mid-1990s, many companies might have travelled further down this road.

6.5 Group structure and business portfolio

Indian business groups have been doing serious introspection about their business portfolios and about their group structure. Group financial structures are also beginning to change as the existing complex web of inter locking shareholdings slowly gives way to more transparent ownership patterns. Consolidation of accounts (which is mandatory for accounting periods beginning on or after April 1, 2001) companies can no longer hide the true state of affairs behind a complex web of subsidiaries.

6.6 Working capital management

Working capital management has been impacted by a number of the developments discussed above - operational reforms in the area of credit assessment and delivery, interest rate deregulation, changes in the competitive structure of the banking and credit systems, and the emergence of money and debt markets. Companies have found their creditworthiness under greater scrutiny than ever before. But top-notch corporate borrowers have benefited from money market borrowing options and other choices. The greater concern for interest rate risk has made choice of debt maturity more important than before. Cash management has become an important task with the phasing out of the cash credit system.

7 Investor expectations

A decade of reforms has changed several investor expectations, but some expectations have not changed and have now become anachronistic. These unrealistic expectations are a major stumbling block in financial sector reforms. Understanding and correcting them is critical to the success of the reforms.

7.1 Repression and inflation expectations

Prior to the reforms, the bank deposit rate was repressed to the extent of about 3% as estimated above. Over extended periods of time, the Indian investor had got accustomed to the idea that safe interest rates in the official market are repressed and that significantly better rates are available in the unofficial market without significant risk. With the end of financial repression in the early-mid 1990s, this perception would perhaps have been broken if official interest rates had risen sharply to signal a decisive break with the past. This did not happen. The end of financial repression coincided with a sharp fall in inflationary expectations, and nominal interest rates fell as financial repression was lifted. Investors do not therefore fully realised that the repression discount that was embedded in bank deposit rates in the past no longer exists.

7.2 Distrust of equities

Except for the eight golden years described earlier in this paper, the performance of equities in India has been very poor. Except for 1984-1992, equities have historically delivered very little capital appreciation during extended periods of time.

7.3 Changing the Expectations

The key stumbling block, therefore, is that many investors are neither willing to accept the low rate of return available on fixed income investments nor willing to take the higher risk that goes with equities. At one level, we can dismiss these expectations as unrealistic and inconsistent with the risk return tradeoff that is the bedrock of modern finance. On the other hand, these expectation are real and changing them is important for the healthy development of the capital market.

- The existing flawed expectations leave investors vulnerable to various kinds of frauds and get-rich-quick schemes.

- They also account for the great allure of assured return mutual funds. These mutual funds guarantee a minimum return that is comparable to or superior to bank deposits, but promise significant upside from the small part of the portfolio that is allocated to equities. The mutual fund needs to hedge its risks well and price the implicit put option correctly. Otherwise, it could end up taking huge losses as has happened in India.

- These flawed expectations are also the major obstacle to the reforms of the small savings system that offers administered interest rates that are too high relative to the free market.

8 The Unfinished Agenda

Throughout this paper, references have been made to the reforms that remain incomplete. The most important and urgent task that remains to be done is that of dismantling the structural and micro regulations that have accumulated over several decades of a command economy. It is also necessary to make the financial sector more competitive to realise efficiency gains, and to ensure that that consumers receive the benefits of lower costs, better costs and greater choices.

8.1 Banking Sector

Some of the major steps that need to be taken on the banking sector include the following:

- The banking system must be made more competitive by removing all structural barriers to competition. Unnecessary structural barriers between banks, financial institutions and investment institutions must be eliminated. It is necessary to withdraw regulatory support to cartels like the Indian Banks Association (IBA). Complete branch delicensing should be introduced and banks must be allowed to open, close, swap or sell branches. The logic of deposit deregulation should be carried further with freedom to fix deposit rates on a branch wise basis. This would allow the older large banks to match the new private banks in the highly competitive urban market without necessarily raising rates in the high cost rural branches.

- Now that the privatization of management advocated by the first Narasimham Committee (Ministry of Finance, 1991) has proved to be a myth, it is necessary to move swiftly to privatization of ownership. A pre-requisite for this would be a cleaning up of the balance sheet and possible recapitalisation.

- The pressing problems of the financial institutions need to be addressed by radical restructuring, downsizing of the balance sheet, recapitalisation and eventual privatisation.

- All quantitative credit controls and measures related to directed credit should be withdrawn.

- The payment system must be modernised rapidly by the rapid adoption of technology.

8.2 Capital Market

In the capital market, the important measures that are needed include the following:

- Short sale restrictions must be removed completely for all players including the institutions. This is the best defence against market manipulation.

- The problems that have arisen from the lack of an effective listing authority for many stocks need to be addressed. The time has come to consider the establishment of a National Listing Authority on the lines of the similar entity in the United Kingdom.

- To achieve genuine investor protection, we must empower the investors. The goal should be to create a statutory framework under which violation of any SEBI regulation or listing requirement gives the investor the statutory right to sue the company and its management. We could try to replicate the US class action model here or we could try to adapt the PIL (public interest litigation) mechanism that the Indian judiciary has used very effectively. What is needed is a statutory sanction for a process in which investors can enforce their rights against companies without the intervention of the regulators at all.

- Surveillance systems need to make aggressive use of information technology and rely on greater transparency and public disclosure.

- The regulators must adopt a more aggressive pro-competitive policy in an environment in which the securities industry is threatening to become significantly less competitive than in the past (Varma 2001).

- The regulatory climate must become more friendly to hostile takeovers.

- An effective and competitive securities lending system needs to be put in place.

- It is necessary to broad base the derivative markets by allowing foreign and domestic institutions to operate more freely in this market.

8.3 Debt and Foreign Exchange Markets

In the field of fixed income and foreign exchange markets, the following issues are important:

- The vulnerabilities associated with the current partial opening up of the capital account need to be addressed.

- The conduct of monetary policy and exchange rate policy needs to take less market distorting forms and needs to display greater sensitivity to the goal of orderly markets.

8.4 The Real Economy

Finally, it must not be forgotten that, in the ultimate analysis, a strong financial sector is built on a strong economy. Real sector reforms (for example in the field of bankruptcy law) are very important. Similarly, an essential precondition for the success of the entire financial reforms programme is the maintenance of macroeconomic stability. The large fiscal deficit is, therefore, a grave threat to the long term success of the financial reforms.

The dynamism of the reform process that was lost in the mid-1990s needs to be recaptured to satisfy the aspirations of the Indian people for a vibrant modern economy with a strong and efficient financial sector.

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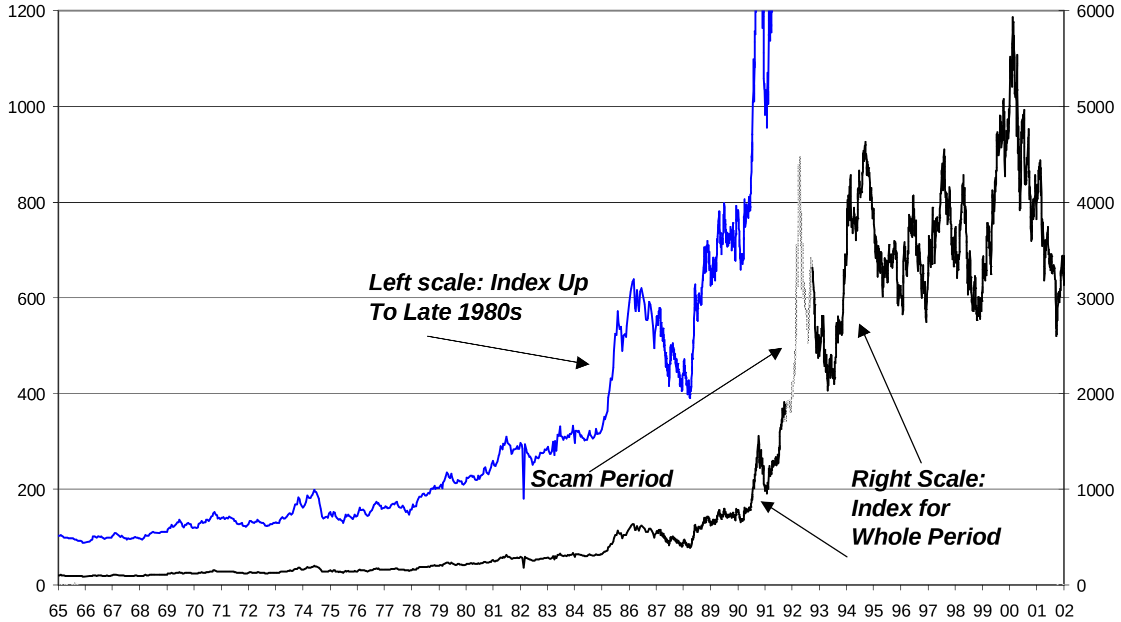
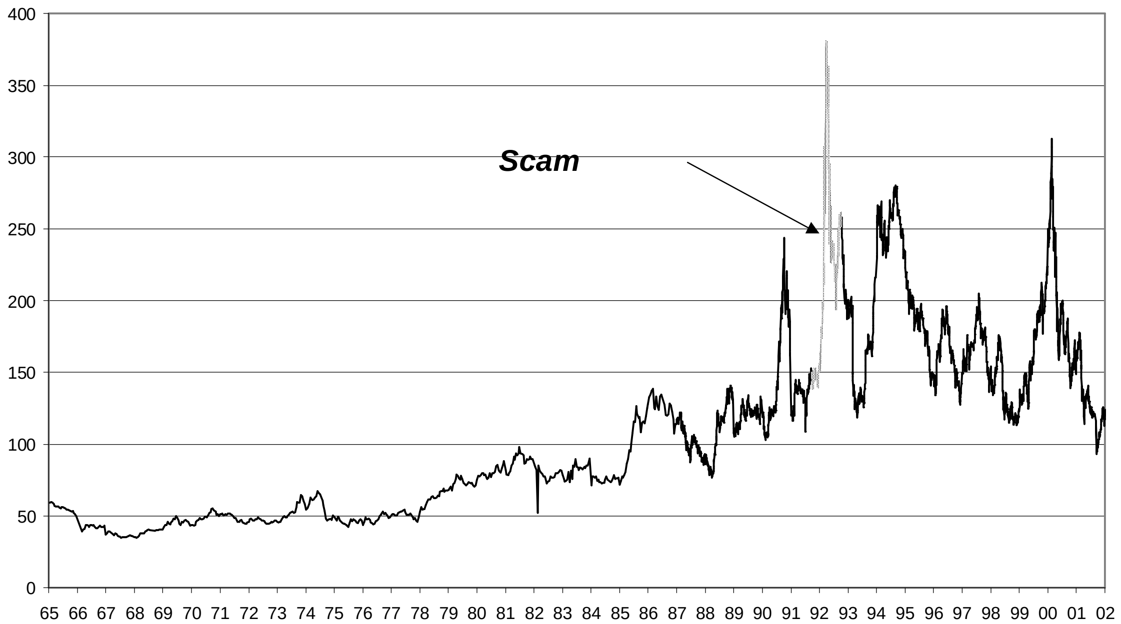
Chart 1: Rupee Stock Market Index (BSE Sensex)



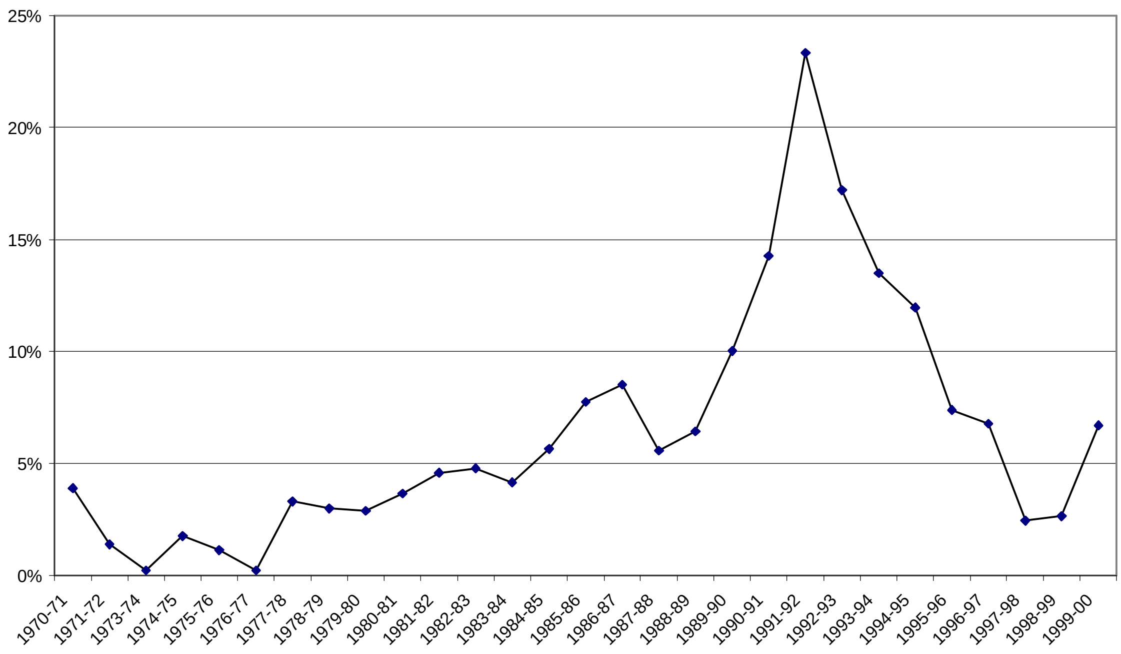
Source for underlying data: BSE and Economic Times (ET).
Prior to 1987, the Sensex is chained back into the ET Index

Chart 2: US Dollar Stock Market Index (BSE Dollex)



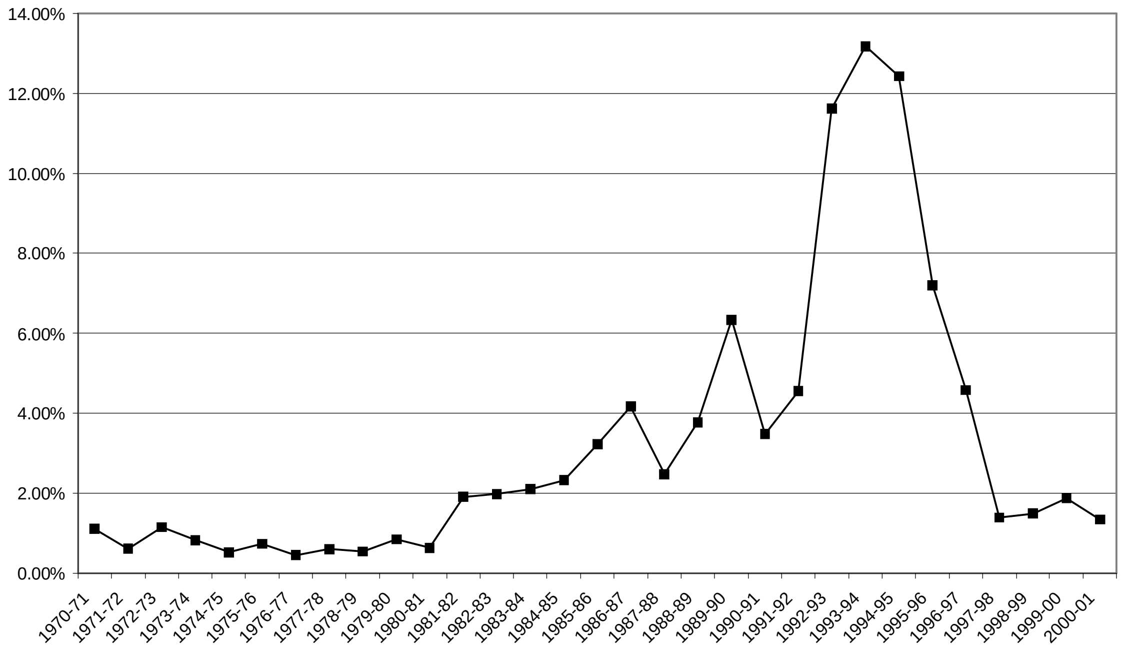
Source for underlying data: BSE, IMF(IFS) and Economic Times (ET).
Prior to 1991, the Dollex is chained back into a currency adjusted Sensex/ET Index

Chart 3: Share of Capital Market in Household Financial Savings



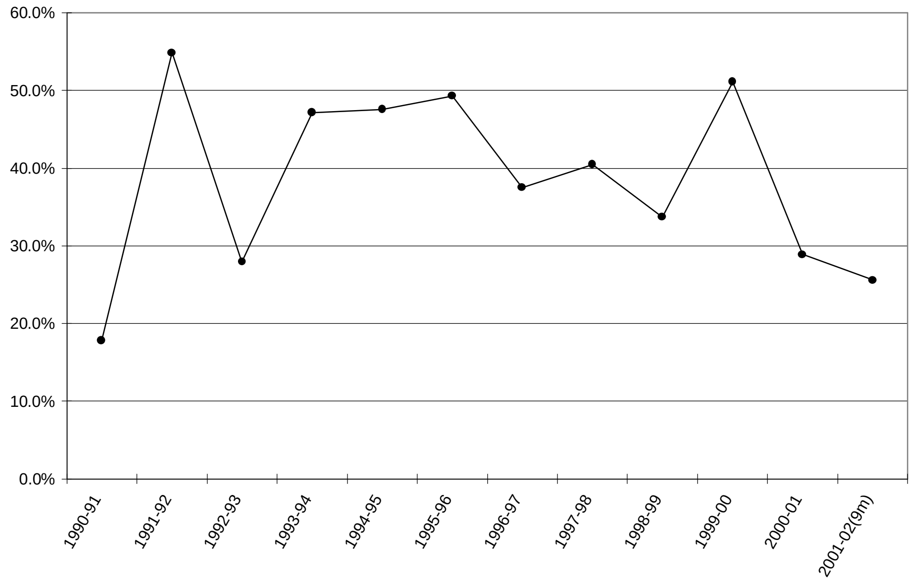
Source for underlying data: RBI

Chart 4: Capital raised in the primary market as % of GFCF



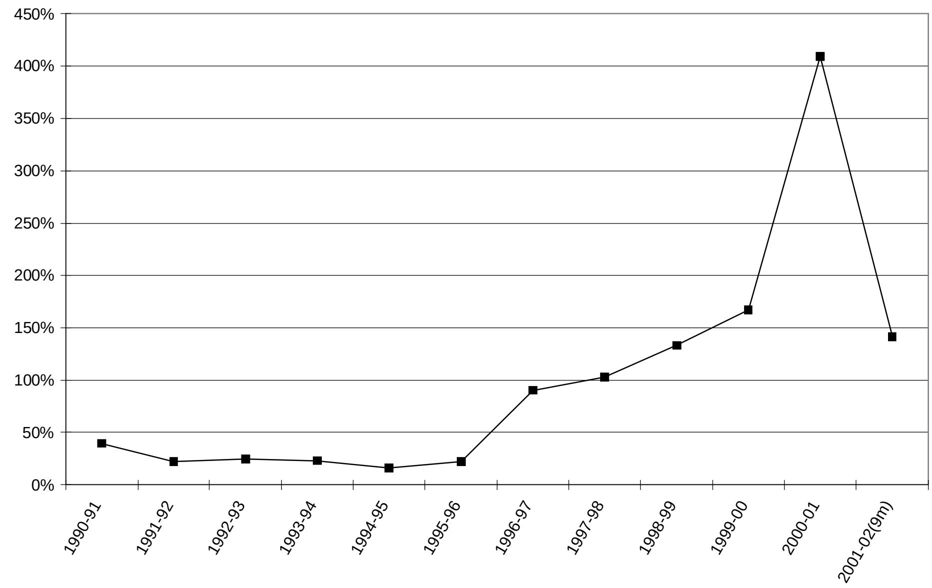
Source for underlying data: RBI and SEBI

Chart 5: Stock Market Capitalization (BSE) as Percent of GDP



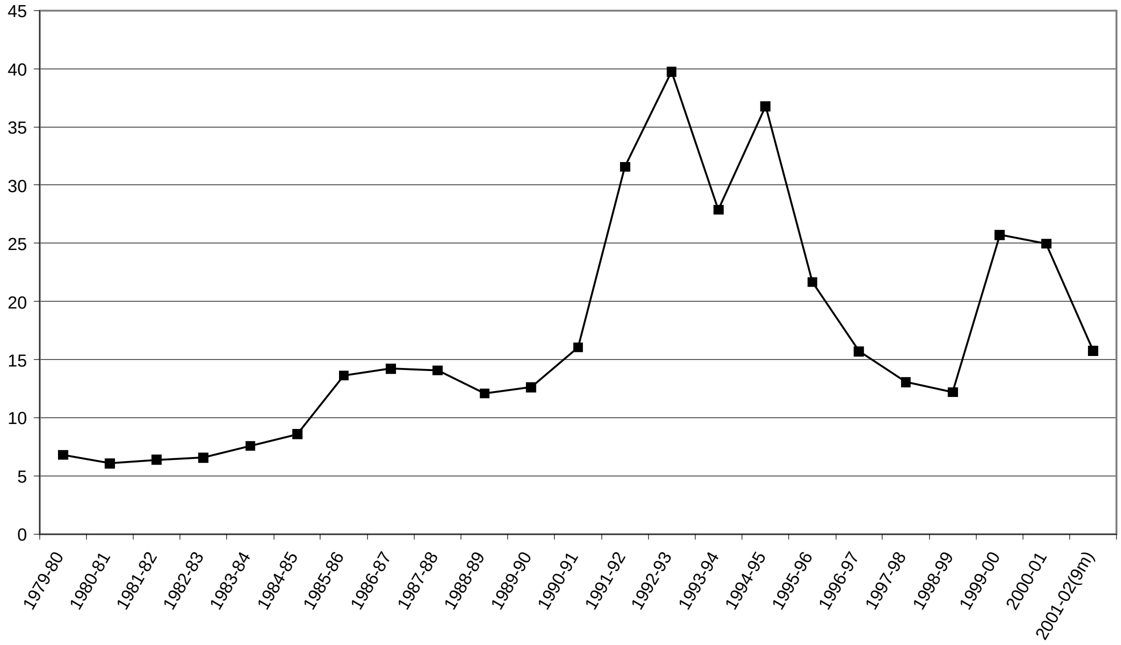
Source for underlying data: SEBI , RBI , Ministry of Statistics and BSE

Chart 6: Stock Market Trading Volume (BSE+NSE) as Percent of Market Capitalisation



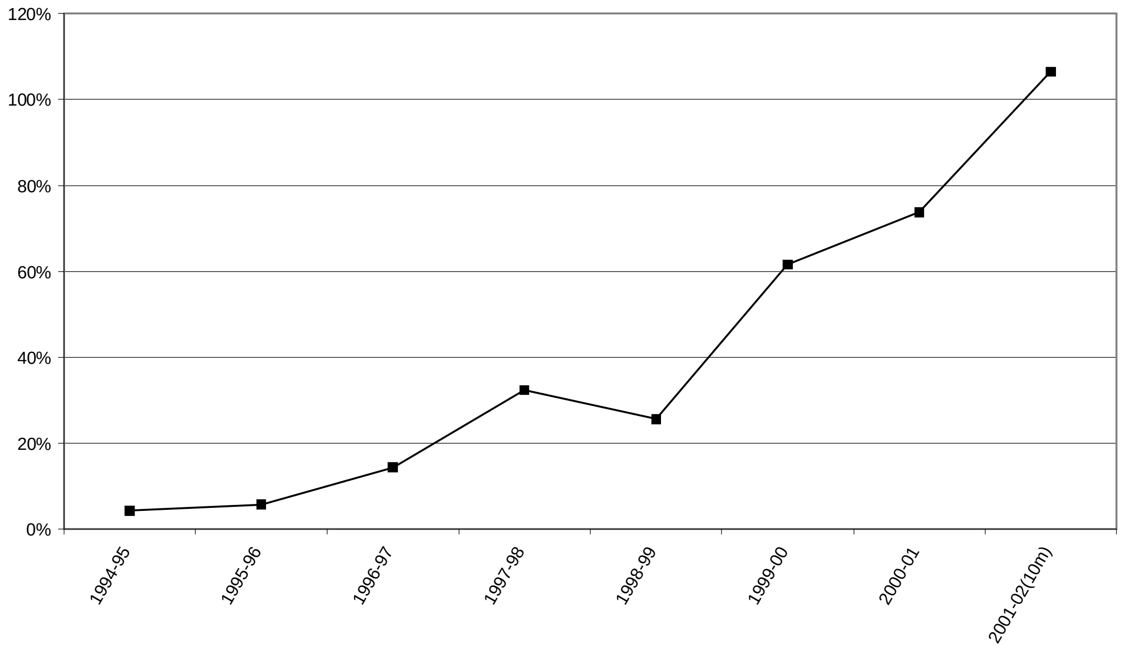
Source for underlying data: SEBI, BSE and NSE

Chart 7: Price-Earnings Ratio of BSE National Index



Source: L. C. Gupta (1998 and 2000) till 1998-99, BSE (Average of Monthly High and Low P/E) after 1998-99

Chart 8: Turnover of NSE Wholesale Debt Market as Percent of Market Capitalisation



Source for underlying data: NSE