

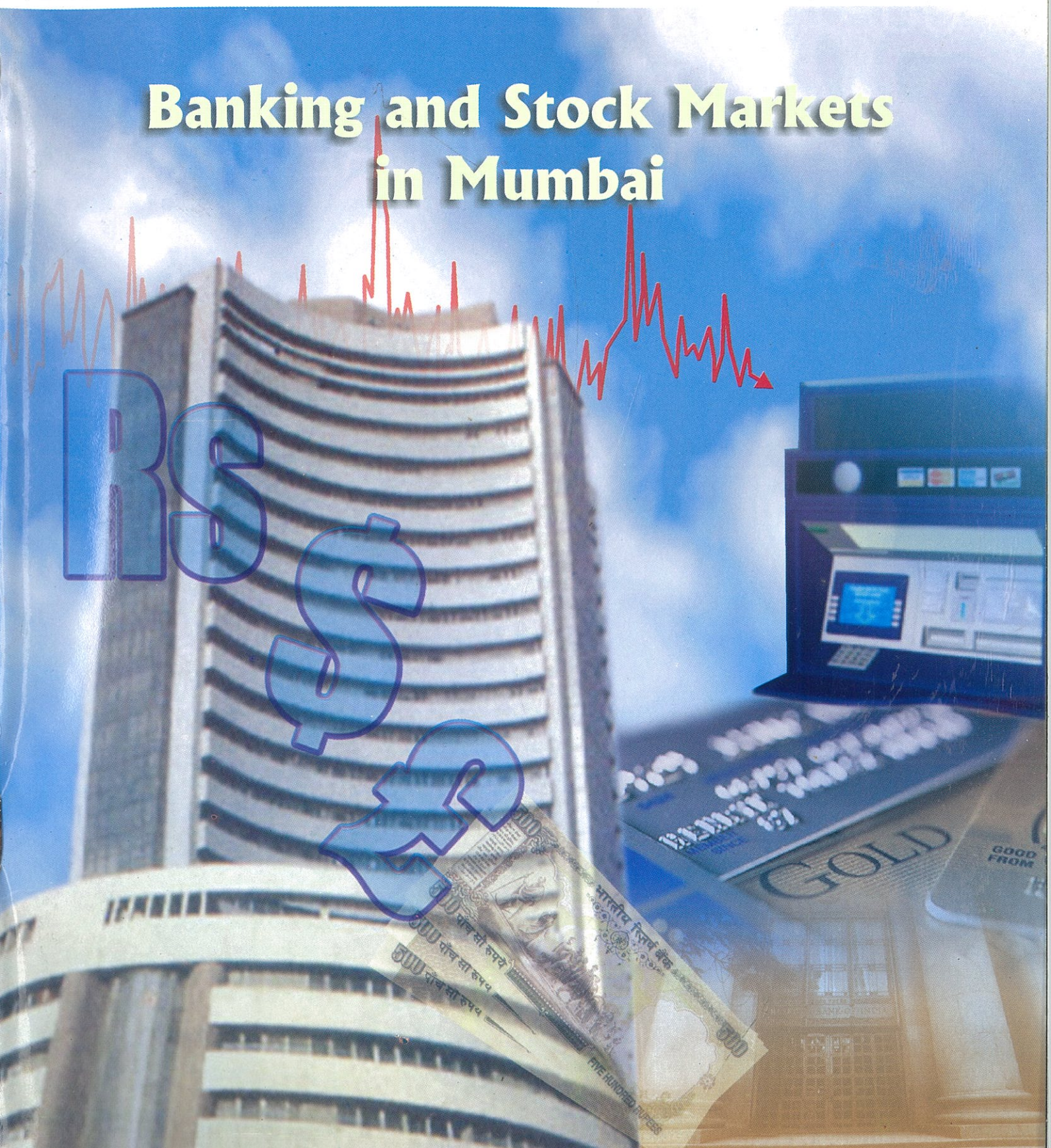


A Publication of Bombay First

# THE CITY

Vol I Number 3 (August - September 2002)

## Banking and Stock Markets in Mumbai





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## From the Editor's Desk

What stands out in the evolution of Mumbai as the acclaimed financial capital of India? Undoubtedly, it is the fabulous contribution of the banking and stock markets to this city over the past many decades. To trace this fascinating progress, we have been fortunate to receive very useful and insightful articles from experts in the field.

To begin with, the chequered history of development of this metropolis was greatly influenced by foreign banks that paved the way for economic and commercial activities. With their very imposing presence, they virtually dominated the show during the British regime. The post-Independence period of India was particularly characterized by the nationalization of the then Imperial Bank of India into the State Bank of India in 1955. A major turning point came about, essentially thereafter, with the nationalization of 14 major private sector banks in 1969. As a consequence, the banking and financial activities of Mumbai have come to be dominated by domestic public sector banks.

However, the next transition was initiated as a result of the triumph of the new philosophy of Liberalization, Privatization, and Globalization. In this ethos of a liberalizing economy, every segment and sub-segment of the banking and financial sector are subjected to the discipline of a competitive market environment. Surely, new challenges and opportunities are being unleashed.

We have also been witness to the emergence of several new institutions, products and services. The creation and success of the NSE is an outstanding and eloquent testimony of what market mechanism and effective techno-managerial efforts can do to change the complexion and contours of this wonderful financial capital of the country. This is just one instance of the multiple feathers in Mumbai's crown.

The necessities of modern banking and financial activities have driven a spate of "innovisions" of financial institutions, products and services. There is a misconception, however, that all that is modern in the current banking and financial world of Mumbai will satisfy only the needs of the *nouveau riche* and the elite. But it is not so; witness, the prospect of micro-finance for bringing about a socio-economic resurgence of those suffering deprivation, generation after generation.

Where do we go from here? The looking glass is crystal clear. The dynamic banking and financial sector of Mumbai has many promises to fulfill - the most important being the emergence of a powerful international financial centre in the years ahead ... This has been one of the significant initiatives of Bombay First. Of course, we have refrained from dealing with this subject in this issue. But there is so much more here for our avid readers ...

(S. S. Bhandare)



## Contribution of Foreign Banks to Mumbai's Economy

(In Conversation with **Mr. Zarir Jal Cama**, CEO, HSBC and an outstanding professional banker)



**Q1.** What in your opinion has been the role and contribution of foreign banks since they began their operations in India and how have they been instrumental in shaping the economy of Mumbai in particular?

**A:** Let me begin by saying that the Hong Kong and Shanghai Banking Corporation's association with the banking industry in India has been for about 150 years and is nearly as old as the history of banking in the country. It goes back to 1853, when the 'Mercantile Bank of India, China and London', was established in Mumbai, with its headquarters in London. The following year saw the establishment of the Bank's first branch in the city. It has since then, steadily grown not only in size but also in terms of its reach. It currently has 31 operational branches spread across 14 cities in India.

In the last so many years, it has not only witnessed the evolution of banking in the country but has also seen Mumbai's transformation to the commercial and financial capital of the country. Over such a long period, it has seen many a transition, but broadly speaking, I need to mention at least three major ones.

First, the pre-Independence period, during which foreign banks dominated the trade scenario in India. Their most important role then was to finance and facilitate the trade and industrialization process in the country. Unlike Indian banks, these banks were registered universally and therefore, enjoyed greater networking with so many branches at the global level.

The second phase associated with the post-independence period, saw the nationalization of major Indian banks in 1969. This led to Indian public sector banks reaching 'commanding heights' in the country and, to some extent, stifled the growth of foreign banks. The concept of 'reciprocity' was very strong at that time. Opening branches in India implied not only going through rigorous licensing formalities with the RBI, but also improving provisions for creating corresponding opportunities for opening branches of Indian banks in respective foreign countries.

The third phase truly belongs to the post-liberalization reforms, unleashed since July 1991, marking a paradigm shift in the economic policies followed by India. Undoubtedly, this has unfolded a new era for the entire banking industry. The policy makers have realized the imperatives of liberalization, privatization and globalization. Also, the realization that India has to move further beyond, from manufacturing and production to service-oriented activities, continues to accelerate the process. Today's world is one without barriers, where technology is advanced enough to facilitate instant communication.

An urgent need was felt to encourage competitiveness in the banking industry and hence a series of reforms were initiated. For foreign banks, this has been the most opportune time thanks to the relaxation of stringent norms binding on their operations for so long. Fortunately, the successive governments have been pursuing the process of liberalization, thereby building the confidence and commitment of foreign banks.

With better international linkages and efficient distribution channels, foreign banks offer better services to their customers. Since they operate in several countries, they have varied experiences of customer handling and product innovation in different environments in various parts of the world. Therefore, they can follow a policy of 'plug and play', which gives them a scope to quickly respond to market requirements by introducing new products and services already tried and tested in other markets.

**Q2.** What are the three or four salient features of the banking scenario in the post-liberalization period, with special reference to foreign banks?

**A:** Liberalization has brought about a remarkable transformation in the banking industry in India, in general and Mumbai in particular. In the last few years, Indians have evolved as discerning customers. Their aspirations and accordingly, their demands have changed dramatically. They are now more open to the acceptance of new financial products, and their changing requirements have encouraged banks to innovate their financial products and their ways of offering banking services. Indeed, the post-1991 period has been the most stimulating



and by far, the best time for foreign banks in India.

*Q3. What are the various obstacles faced by foreign banks in the expansion of their businesses in Mumbai?*

A: Indian banks, particularly, private banks and the rapidly awakening public sector banks are vigorous in their operations, making the banking scenario really challenging. While evaluating the current situation, at the very outset, I must compliment the policy-making authorities, especially the RBI for responding proactively by introducing banking reforms. The present policy framework is conducive to foreign bank operations in India. There are as such no constraints on the expansion of foreign banks.

I would like to emphasize that the 'regulatory environment is far more conducive in India compared to most other countries in South East Asia.' Foreign banks are now bestowed with greater scope to participate in the Indian banking business.

However, there are a few aberrations and we are still subjected to some restrictions. For example, when foreign players want to participate in the securities market in India, it is imperative for them to do so in partnership with an Indian firm. Again, as far as the insurance sector is concerned, the 26% cap is definitely a limitation, especially because raising the limit will cause no harm. It appears that the regulators are still tentative about raising the upper limit of foreign ownership in Indian banks, since they fear that it may result in foreign players taking over the domestic market.

This is not going to be true. Take for example, deposits; foreign banks control only 6 to 7% of the total bank deposits in India. The remaining is entirely with Indian banks. Even if there was complete freedom of operation, only three or four foreign banks may open additional branches.

Take the case of mergers and acquisitions (M&A), which is becoming a very common feature in today's corporate world. There are only 3 or 4 players like HSBC, Citibank, Standard & Chartered and ABN Amro, who have the capacity to bid for the acquisition of some private or public sector banks. But most banks operating at a global level, whose strategy is more consumer-oriented, will not think of buying Indian banks. Even if foreign banks seek to buy out Indian banks, the country will benefit in terms of greater flow of foreign direct investment.

*Q4. Whilst on this subject, may we seek your views on International Financial Centres (IFCs) and their relevance to foreign banks?*

I strongly believe that while regulatory and

legislative changes are very crucial, these *per se* would not be enough to facilitate the formation of a vibrant IFC in Mumbai. There are a number of other tangible and intangible factors responsible for its success, the most important being the physical infrastructure.

Of all Asian countries, Hong Kong and Singapore are the only two cities, which have the configurations of mainline financial centres. These countries have the basic framework of rules and regulations, a suitable workforce, tax consultants, insurance companies, etc., underlying any financial centre.

Besides, any financial centre should have more stability. The presence of good governance becomes very vital in this context, since it facilitates inflow of foreign capital through avenues like FIIs, etc. Prospective investors should feel confident about their investments.

Both India and Mumbai have the advantage of a favourable climate to attract FDIs. But inadequacies of physical infrastructure are one of the major drawbacks. If Mumbai is to be promoted as an IFC, it is not proper to adopt a 'silo' approach. We require a holistic approach. In addition to focusing on regulatory aspects to accelerate opportunities of international financial transactions, it is equally important to concentrate on strengthening the physical infrastructure of the city. Besides, we also require a more investor-friendly procedural set-up; and so on.

*Q5. What are the various financial products, services, and significant innovations that have been initiated by foreign banks in course of their operations in Mumbai?*

A: HSBC has had a strong banking platform since the last few decades. We offer a wide range of financial services to our customers. For example, our personal financial services, include a number of personal lending and deposit products, through our branch networks spread across the country. Most of these services are also extended to our NRI customers.

The other branch-wide facilities offered to our customers include international Gold and Classic credit cards from Visa and MasterCard and debit cards from Visa. All our customers have access to 24-hour banking services through an extensive network of Automated Teller Machines (ATMs), an integrated Call Centre and Internet banking.

The HSBC Group develops and applies advanced technology to the efficient and convenient delivery



of banking and related financial services. HSBC's Internet banking service, [online@hsbc](mailto:online@hsbc), provides customers with an integrated and secure platform to access their accounts.

I must also state that, so far, as many as 80,000 customers are registered for online banking with HSBC. These customers not only check their accounts and transfer funds online, but they also make bill payments and purchases online. Most of the processing is done online, but since digital signature is not possible, some physical verification of the entity becomes necessary. Incidentally, we also have a very innovative banking service called **Hexagon**. It is the HSBC Group's dedicated electronic banking (e-banking) service which allows users to perform financial transactions, obtain international financial markets information, and review details of their domestic and international account, from anywhere in the world, 24-hours a day. The bank has experienced a tremendous increase in the volume of transactions since the last few years.

It is a little known fact that the HSBC has been the pioneer in the use of computers in banking. Indeed, we are proud to proclaim that we have firsts to our credit, namely:

- a) First, in introducing computers in banking in 1983 in our front-offices followed by computerization of back-offices in 1985
- b) First, in launching ATM facility in 1987 and
- c) First, in launching off-branch ATMs facility in 1995

*Q6. How do you envision the future of foreign banks in Mumbai?*

A: Looking at the future, I perceive three or four major trends likely to emerge:

First, at present, we have a fairly large presence of foreign banks in the country. However, effectively in terms of volume of business and operations, only a few of them dominate the scene. I see this pattern continuing for quite some time.

Second, there is a strong prospect of consolidation of banks through the route of M & A. This would indeed, galvanize not only the financial sector, but also the real sector of the economy. In the process of consolidation, I would strongly recommend the merger of a strong bank with another strong bank, rather than the commonly perceived need of encouraging the merger of a weak bank with a strong one. This is so, because the merger of a weak bank with a strong one often tends to jeopardize the health of the latter.

Third, the introduction of stringent provisioning norms, Capital Adequacy Ratio (CAR) as well as better control over NPAs through ordinances dealing with the securitization and reconstruction of financial assets will strengthen the banking system as a whole.

Lastly, India's effort towards opening the financial sector in general, and banking sector in particular, will have to be compatible with expected changes in the framework of GATS and other related WTO provisions.

Speaking specifically about the prospects of HSBC, we not only feel very comfortable in the current business environment of the country, but also greatly enthused by it. As such, the HSBC has a strong presence in the rapidly growing business centres in the country with highly professional and innovative techniques of banking. It has also started setting up its global back-offices in Bangalore, Hyderabad and a software development centre in Pune.

#### FDI in the Banking Sector: Key Features

- FDI up to 49 per cent from all sources is permitted in private sector banks under the automatic route, subject to conformity with the guidelines issued by the Reserve Bank from time to time.
- Foreign Banks having branch presence in India are eligible for FDI in the private sector banks subject to the overall cap of 49 per cent with the approval of the Reserve Bank.

#### *Limit for FDI in the Private Sector Banks*

FDI and portfolio investment in nationalized banks is subject to overall statutory limits of 20 per cent. The same ceiling would also apply in respect of investments in the State Bank of India and its associate banks.

The norms also include provisions relating to (i) voting rights of foreign investors (ii) approval of the Reserve Bank and reporting requirements (iii) conformity with SEBI Regulations and Companies Act Provisions and (iv) disinvestment by foreign investors.



## Stock Markets in Mumbai

- Dr. R. H. Patil



All those who invest in equity markets or discuss the subject of capital market even cursorily recognise that the centre of gravity of Indian capital and financial markets lies in Mumbai. Although India may have lagged behind several Asian countries in terms of economic development and level of industrialization, Indians can justifiably be proud that the first stock exchange of the Asian continent was set up in Mumbai. The Stock Exchange, Bombay, popularly known as BSE, was established in Mumbai in 1875, a year before the Tokyo Stock Exchange was established. As years passed, many other stock exchanges came to be set up in India. At one stage we had nearly 23 functioning stock exchanges in India. Many foreign visitors until recently expressed their surprise whenever they heard that we had so many functioning stock exchanges and also the second largest number of listed companies in the world.

In olden days, floor based trading system made it necessary to have a stock exchange each in all those cities that had a reasonably sized investor population. These apart, regional stock exchanges also satisfied aspirations of the local population, which took pride in saying that their city/state also had a stock exchange. In a way the local stock exchange was considered to be a symbol modern financial system. But over a period of time the stock exchanges in smaller cities built up business linkages with the bigger stock exchanges nearby. It is for this reason that the stock exchanges located in Mumbai, Kolkata, and Delhi emerged as the focal points with the nearby stock exchanges almost functioning as their satellites. With industrial activity thriving rapidly in areas surrounding Mumbai the importance of Mumbai as the stock-trading centre grew tremendously. The BSE, being the largest stock exchange in Mumbai until 1994, emerged as the most important and dominant stock exchange of the country. During the 1980s and the early part of 1990s, BSE used to account for nearly 70 % of the trading turnover of all the stock exchanges in India.

With the setting up of NSE in 1994, the situation has undergone a dramatic change. Right from day one, NSE introduced a totally new trading technology that enabled it to extend its reach to any part of the

country with tremendous ease. It introduced one of the most sophisticated technologies for trading in equities and debt instruments on a wide area network basis. It is pertinent to emphasise that NSE happens to be the first stock exchange in the world to use satellite communication network to provide connectivity to all its brokers who set up their trading terminals in different cities and towns so as to be as near as possible to the clusters of investor population. Some of NSE's big brokers have set up their terminals in 50-60 cities/towns. In a sense, the NSE brokers adopted the branch banking technology so as to serve a large number of investors located in different parts of the same city or different cities/towns.

NSE is, therefore, able to serve investors located close to 400 cities/towns who can execute their trades within a response time of less than two seconds. NSE brokers have trading terminals right from Kanyakumari to Srinagar, as also in some of the most remote places like Jorhat in Assam. This geographical spread has lent considerable depth to trading and has consequently narrowed the spreads between buy and sell quotes in most of the stocks. It has, therefore, significantly improved trading efficiency of the capital markets almost on par with that of such stock exchanges as the New York Stock Exchange or the London Stock Exchange. Most of the regional stock exchanges including the BSE found it difficult to provide such highly competitive trading screens to the investors. Since trade execution takes place on NSE at very fine prices and with bare minimum time lag, trades from all other stock exchanges have increasingly shifted to NSE at Mumbai.

In this context, it may be noted that liquidity and order depth of a trading book are also subject to Newton's law of gravity. Just as large mass attracts smaller surrounding mass, the huge liquidity and order depth of NSE has sucked the liquidity of most of the other stock exchanges in the country. Once members of the regional exchanges saw that volumes on their exchanges started dwindling, they rushed to take membership of the NSE. Other members of the regional exchanges, who were not quick enough to grasp the developing reality, realised that they would not be able to sustain their operations for too long. Since many of them also did not have enough resources of their own to take up NSE membership, they responded positively to a suggestion from the



NSE about getting trading rights on NSE through a different route. Several regional exchanges set up a subsidiary company of their own which took membership of the NSE and brokers who did not take direct membership of NSE became sub-brokers of the NSE by taking a trading terminal provided by the subsidiary company of the concerned regional stock exchange. As a result of all these developments almost all the regional exchanges have no trading activity worth the name. There are only three stock exchanges that dominate the trading volume, namely, those located at Kolkata and Mumbai (i.e. NSE and BSE.)

With the commencement of trading in equity-based derivatives in India the grip of Mumbai on the capital markets of the country strengthened further. Since derivatives trading is a far more complex system, all exchanges other than the BSE and NSE have found it impossible to set up a derivatives trading wing in their stock exchanges. Technology and other infrastructure needed for derivative trading is a highly expensive proposition. Moreover, the human resource skills needed to successfully manage a derivatives trading wing are of very high order.

Even a large and resourceful stock exchange like the BSE has found it difficult to keep up with the breakneck speed of the NSE in this area. Although BSE commenced its derivatives trading three days before NSE, it has considerably lagged behind NSE even in this area primarily because of two reasons:

- First, BSE was over-obsessed with an archaic mode of trading, popularly known as 'badla' trading system. Therefore it did not put its heart and soul in setting up an efficient derivative wing.
- Second, its technological ability to manage the complex options and futures trading activities has proved to be quite inadequate; this has also been proved by its poor performance in derivatives trading.

Before derivatives trading commenced, many knowledgeable people had predicted that the BSE would have a major head-start over NSE since BSE's index viz., SENSEX was far better known across the country than NSE's NIFTY. But as things have turned out, BSE could not derive any advantage from the popularity of its widely known stock index. Currently, the daily trading volumes of BSE's derivative segment are not even equal to 0.2% of

NSE's derivative trading volumes. There are press reports that BSE is toying with the idea of shutting down its derivatives segment since it is finding derivatives trading to be an expensive proposition. Given the serious problems that a stock exchange like BSE is facing in the area of derivatives trading, it is most unlikely that any other stock exchange in the country would ever venture into this territory. It is, thus, obvious that Mumbai will have total sway over derivatives trading in the country through the dominance of NSE.

What does the future foretell? Will NSE continue to maintain its lead as it has been doing for the last well over five years? One reliable clue that helps us to forecast in this area is the trend in the derivatives trading volume. It is widely known that with the separation of the cash and futures markets, a large number of market players start hedging their risks in the derivatives markets. After the introduction of rolling settlement from 2<sup>nd</sup> July 2001 in all those stocks, which really count from the viewpoint of trading turnover, the Indian cash markets have got effectively segregated from the futures. Since the derivatives trading volume is significantly higher in NSE, large number of players will be attracted to it. A highly liquid cash market of NSE means lower transaction costs in the derivatives market. Hedging strategy becomes most effective and efficient if positions in the cash and the derivatives market are created almost simultaneously. Hence, more and more players will get attracted to the most liquid exchange if it can offer trading facility in both the segments. Further, since the Nifty index is calculated with the prices of NSE's cash market, it would not be profitable to build a position in the cash market of say BSE or CSE and cover the risks in NSE's derivative markets. Such a strategy is least efficient. In any case, one should not ignore the basic fact that NSE's significant lead over BSE in both the derivatives and cash market is an indication of the fact that markets have cast their votes in favour of NSE.

Thus, the sway of Mumbai on the entire capital market of the country is almost complete, especially because of NSE. In the long run, our country, in all probability, will have only two functioning stock exchanges viz. NSE and BSE, both of which are located in Mumbai.

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*(The author is the Chairman of the Clearing Corporation of India Limited (CCIL))*



# The Latest Financial Products Launched in the Indian Markets

- Mr. Ravi Mohan



## 1. Background:

Necessity, it is said, is the mother of "Innovation". In keeping with the hard realities of times, Indian financial markets have undergone a virtual transformation with a plethora of products being now available and with a high degree of product acceptance for some

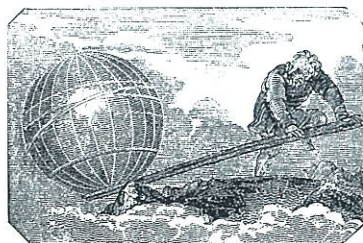
products. They are the outcome of removal of time-warped regulatory restrictions and Indian innovativeness at its best - opening up new segments of financial markets and reducing distortions. This process we know as Market Completion.

Financial products are risk transfer mechanisms - a play between safety, liquidity and risk. Analytically, from an organization's viewpoint - we may classify them as Asset (Market) side and Liability (Product) side. In general, innovations on the Market side have been better orchestrated & received, though innovations on the product side, have been no less savvy.



## 2. New Financial Products in "Markets":

The driving force behind the product side innovations has been the market reforms - in regulations and process.



### 2.1. Equity & Derivatives:

**With a lever you can lift the earth**

Developments in the underlying clearing and settlement

practices in Indian equity markets have been at par with international standards. The recent institutional interest resultant from two-way fungibility of GDRs is a positive indicator.

In addition to a deep and vibrant cash market, India

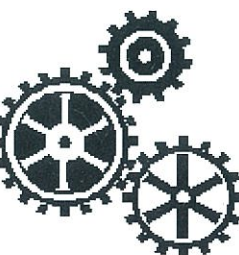
now boasts of a state-of-the-art derivatives market. Futures on index and stock, options for index and select stocks are traded actively. Total derivatives turnover is around Rs 1200-1500 crore, about 60% of cash mkt volumes. The products are relatively new (less than 2 years) and markets remain confined to speculative interests - with a distinct stock-specific bias. Stock futures form the largest segment of this market at around Rs 750 crore. We expect that, as in developed countries, index derivatives will be actively used by asset managers for effective hedging and as a borrowing and lending tool, which may result in increased interest for index options and futures.

On the other hand, it may result in interesting products, particularly for the mutual fund industry - index options are useful for interesting new products like "guaranteed return funds" (e.g. an index fund bundled with portfolio insurance in the form of a put option on the index) or "equity-linked bonds" (e.g. an fund which is 95% invested in a straight bond, while 5% is invested in a call option which sharply benefits from the upside potential of the market index).

### 2.2. G-Sec Market:

#### Wheels of Progress

The gilt market has witnessed institutional and structural reforms, provoked by RBI - a result of necessity to raise funds efficiently. In view of international capital adequacy and other prudential norms being applicable to India, the ability of the financial system to fund Govt's borrowing programs is limited. RBI's focus seems to



be on a) developing a retail market and b) developing a well-defined tradable spot curve across maturities.

With the real interest rates at international levels, the gilts market has witnessed a number of product modifications - including introduction of put/call options and floating rate G-Secs.

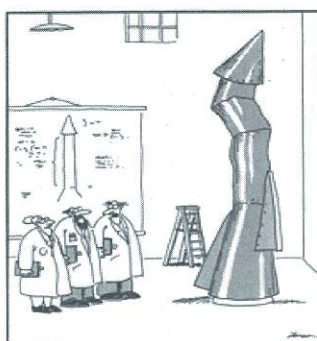
The most significant institutional developments in this market are the introduction of Negotiated dealing system with a view to facilitating electronic bidding in auctions and



secondary market transactions in Government securities and dissemination of information on trades on real time basis. The Real Time Gross Settlement (RTGS) system will ensure a real-time settlement and with a clearing corporation in place (CCIL) – institutional impediments are removed for introduction of STRIPs (on G-Secs) – which will help in development of a spot curve – as well for retail participation. (For the latter objective, the removal of other interest rate distortions (e.g. RBI's tax-free bonds is also required.)<sup>1</sup>

### 2.3. Inter-bank Market, Swaps and Derivatives:

#### Rocket science?



"It's time we face reality, my friend. We're not exactly rocket scientists."

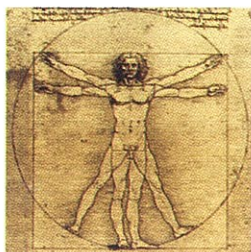
The market for swaps started in mid-1999 and remained dormant till mid-2000. Though the players (bank treasuries) are generally sophisticated, the institutional restriction on swap intermediaries (giving bid-ask quotes) had initially constricted its development. The swap market is a

combination of interest rate and cross-currency products. Even in its OTC structure, peak daily swap volumes are in the region of Rs. 300 crore, when interest rate volatilities are high. The main players in these markets are corporates hedging their liability books with the banks, which in turn hedge their exposures with counterparties.

Cross-currency options, though permitted (caps, collars etc.) are in a nascent stage.

### 2.4. Corporate Debt / Long-term Finance:

#### Innovations spring eternal



Though funds mobilized by this market are over Rs.250,000 crores, the daily liquidity in this market is in the region of Rs. 100-200 crore. Abolition of stamp duty, dematerialization Product innovation in this segment will

in future be guided by the supply of long-term funds—particularly from insurance. Considering the plain vanilla offerings at present, product innovations in

<sup>1</sup> Trading volumes in this segment is Rs 5000-8000 crore per day or 1% of the outstanding securities—about 3 times the volumes 2-3 years back.

this segment are only a matter of time. The other factor influencing this segment is the development of appropriate benchmarks and valuation, which has been facilitated (particularly in the MF industry) by CRISIL's Debt Valuer.

The major product innovations in this segment include:

- **Floating rate debt** – Linked to a G-sec or other acceptable benchmark, this takes care of investors' market risk and is (generally) issued by financial institutions (including recapitalizing loans for Tier II capital).

The other variant in the market against credit downgrades is the **credit float**, which neutralizes price risk of downgrades.

- **Securitization of receivables** (auto loans, credit, card etc.) has emerged as instruments offering attractive returns, and limiting losses in case of defaults (unlike debt instruments, which default for the entire amount). It can finance large projects and diverse range of activities—infrastructural funding, financing purchase of aircrafts (Jet Airways) or for restructuring debt portfolios (ICICI CDO program). With gradual institutionalization of housing loans, emergence of Mortgage Backed Securities seems to be a distinct possibility in future.
- Financing Long-term funds is a challenge the Indian debt markets will be faced in near future. **Take-out financing** offers a mechanism, by offering the primary financier (in project stage with higher risk) higher returns, and then pass it to say, a pension fund seeking longer duration assets.

The list is in the table illustrative and products in this segment will increase considerably in near future.

### 3. Financial "Products":

We now try to outline, some inadequately, the virtual explosion in new financial products vying on the shelf for consumer attention—mostly in the retail segment.

Banks (and NBFCs) are in a position where they finance both consumer spending and investment products. This constitutes the largest segment of financial products. Faced with the dual challenges of sagging consumer demand, and low interest rates – convenience, flexibility and cross selling to the targeted consumer have become the watchwords. Technology has played no small role in it – both in servicing and targeting customers and their staid nationalized counterparts are pursuing the Private players. With interest rates coming down, targeting customers with appropriate products makes imminently good "business sense", while keeping risks at manageable levels.



Markets	Products & Measures	Players	Products
<i>Equity Mkt.</i>	<b>2 way fungibility of GDR</b>  T+3 settlement systems Automatic Lending & Borrowing, DVP	<i>Mutual Funds</i>	<b>SIP, SWP</b> <b>Fixed Maturity Plans</b> <b>Value funds,</b> <b>Exchange Traded funds</b> "no load", Specialized benchmarks and performance measurement products
<i>Gilt Mkts.</i>	1. <b>Put/Call; Floating rate G-Secs</b> 2. <b>Introduction of STRIPS*</b> <i>RTGS (Real time Gross settlement) CCIL, NDS</i>	<i>Banking</i>	<b>Cash Management</b> <b>Financing,</b> <b>Auto/Home loan variants, Gold Bond Scheme</b>
<i>Corporate Debt/ Long Term Finance</i>	1. <b>Credit linked &amp; floating rate debt</b> 2. <b>Securitization of receivables (CDOs)</b> 3. <b>Take-out financing of infra projects</b>	<i>Insurance</i>	Pvt. players in the insurance business offering usual products like term coves, Unit linked plans, Health Insurance
<i>Derivatives</i> <b>Equity :</b>	1. <b>Index and Stock Options</b> 2. <b>Index and stock futures</b>		
<b>Inter-bank/Debt:</b>	<b>Interest Rate Swaps</b>		
<b>Forex:</b>	<b>Cross-currency Swaps</b>		
Items in <b>Bold</b> indicate products; items in <i>italics</i> indicate process modifications. <b>Thermal</b> map indicates Product acceptability - from <b>Red</b> indicating high acceptability to <b>Blue</b> indicating low acceptability			

MFs are fighting a dour battle against stagnant mobilizations in the face of a grim economic slowdown.

Private insurance players, though having international affiliations are yet testing waters-the brand, network and products of LIC still looms large. However, a few "advanced" products are in the process of being introduced even in this nascent stage.

### 3.1. Banks/NBFCs:

#### Life is like old wine in new bottle

- With interest rates coming down, banks are offering various facilities to its customers for their deposit products – often technology driven. "Autosweep" accounts facilitate excellent cash



management, being offered by major private players like ICICI Bank, HDFC Bank, etc. Any time, anywhere banking (e.g. Internet banking) and ATMs have entered the lexicon of the urban middle-class.

- At the top rung of personal financial products are credit cards: the ubiquitous plastic, now 15 million and growing (despite extremely high financing rates), has introduced features like pre-set spending, international acceptability (in addition to add-ons like accident insurance, add-ons and freebies). Charge cards / Debit cards, which give anywhere access to Bank accounts worldwide, are also picking up in India.



- Another "innovation" is in the area of Personal loans, where high interest rates as high as 19% pa are being sustained. While this segment is not new, its pick-up is due to USPs like absence of paper-work, no security, flexible servicing, etc. This segment is about Rs 32000 crore at present and is expected to more than double in the next 5 years.
- Operations of the more established segments such as housing loan and vehicle financing has seen considerable streamlining of procedures. There were failures along the way. Indians did not part with their considerable holdings of gold. Aversion to conversion of jewellery, and secular downtrend in gold prices (since then reversed), and comparatively lower rates of return did not allow the scheme to succeed.

### 3.2. Mutual Funds:

#### When going gets tough



The tough innovate. The industry stagnant at Rs 100,000 crore has seen the emergence of private players, whose survival depends on adapting to times (and tax policies). The industry players so far has not been able to garner the funds flowing out of the close-end UTI schemes, as their reach is limited.

However, there have been a number of product modifications. The Systematic Investment Plans were an outcome of "value averaging" principle in a non-trending market. With dismal performance of equity markets, and the regular income distribution in buoyant debt funds, Systematic Withdrawal Plans offered an avenue of protection against dividend taxes.

Fixed maturity Plans are products in the nature of Investment Trusts where the investments are locked in virtually risk-free securities, thus eliminating credit and market risk.

With mobilization in equity funds drying up, investment discipline is being spelt out in scheme objectives. E.g. Funds, which buy and sell on the basis of market and stock PE's, have come into being.

Exchange traded Funds, which are in the nature of Depositary receipts on underlying index scrips have been launched recently. The advantages are in terms of lower tracking error, and taking advantage of intra-day fluctuations-i.e., the convenience of Index Futures (minus the leverage). The product, introduced by Benchmark AMC has however, not been successful initially, probably a result of its sophistication, market conditions and the MF's lack of reach.

In future mutual fund products using derivatives – "guaranteed return funds" "equity-linked bonds" as mentioned earlier in the article, asset allocation schemes ("active" balanced funds, which shift asset allocation according to market conditions. If current rules are modified – Fund of funds and property funds seem distinct possibility

### 3.3. Insurance & pensions:

#### Sold not bought

Though 12 life-insurance and 5 non-life insurance companies are in operation, it is LIC the behemoth, who holds sway in terms of policies (with a 98% share) and is growing at 20% pa –owing to a low penetration level of around 25%. However, the players are cautiously introducing products outside endowment and term policies.

Innovative products in this area include mortgage insurance, unit-linked insurance plans on the life

side, the emergence of specialized "catastrophic" policies in health insurance – and preliminary formation of HMO type arrangements

that generally forms the backbone of modern healthcare policies.

### 4. The Future:

#### Through the looking glass

Looking ahead, I feel we are in for interesting times. Market growth spawns innovation and import of best practices –regulations can be a catalyst. The three segments, which we think, will have the most product introductions and innovations are: Mutual Funds and Pension Funds on the products side and structured (read securitized) instruments on the market side.



Interest rate and forex derivatives will witness introduction of advanced and sophisticated products. The reason for this confidence on MFs and Pensions is contingent on the fact that investment and life cycle savings of households which are today moribund in bank deposits –and financing the bank liquidity and Govt's borrowing program - will some day seek better avenues and finance asset markets, infrastructure ...and growth. The question is ..when will confidence in financial markets change the tide?

(The author is Managing Director & Chief Executive Officer of Credit Rating and Information Services India Limited (CRISIL))



# The City of London & The Euro

- Ms. Dame Judith Mayhew

The City of London, situated at the heart of the Greater London metropolis, is firmly positioned as the world's leading international financial and business centre. Key to the City's success on the international stage, is its openness and attraction to foreign businesses. Foreign institutions, which today employ approximately 40% of the City's workforce, are drawn to the City by the presence of the full range of financial and professional services - everything global financiers need to do business is to be found on their doorstep. It is this range of business, and its high concentration into such a small area, that makes the City unique, and puts it ahead of financial rivals such as New York and Tokyo. This is why more foreign banks locate in London than anywhere else and the foreign exchange market is the world's biggest.

Whilst the City's reach is truly global in nature, it is of course extremely important to the UK economy. In 2000, the City's GDP was estimated at nearly £22 bn, which accounted for 2.7% of UK GDP.\* As Europe's financial capital, the City is also vital to its European neighbours. At present, over half of all investment banking and related activity in the European Union (EU) takes place in London.

The City is rightly proud of its prestigious status at a domestic, international and European level. It knows, however, that it can never take its position for granted. New challenges and demands are constantly arising, many in the European arena - the launch of the euro in eleven of the fifteen European Union countries being the most significant in recent times.

## Responding to the Emergence of Euro

The City of London, led by the Bank of England, has successfully established a leading role in trading and managing the new single currency, irrespective of whether the United Kingdom joins the euro or not. The UK's decision on entry is initially for the Government and then for the population as a whole in a referendum. The Corporation of London takes no side on this issue, but every effort has been made to retain the City's dominance in the European currency markets. The UK may be in or out of the euro, but the City of London has been "in" from the outset.

\* 'London's contribution to the UK Economy', Centre for Economics and Business Research, July 2001, Page 46.

Whilst euro notes and coins only came into circulation in the 12 eurozone countries from January 2002, the single currency has been very much a reality since its original launch in January 1999. Although outside the eurozone, the City has shown that it has a key role to play, and much to contribute, to the ongoing development of the EU's new economic order. The City was fully prepared for the euro, and made it clear from day one that it would offer a full range of financial services in the single currency. This thorough preparation has paid off. Deep and liquid euro markets have become well established in London, replacing the more segmented markets in the old national currencies such as the Deutschemark. At present, 41% of foreign exchange trading in London involves the single currency and 62% of transactions at London International Financial Futures and Options Exchange (LIFFE), and 48% of over-the-counter derivatives business are conducted using the euro.

However, just as the City has seen the introduction of the single currency as an opportunity, so have other financial centres - not solely in economic terms, but in their attempts to undermine London's European pre-eminence. According to a recent report by the respected think tank, the Centre for Economics and Business Research (CEBR), it is vital that London defends its dominance - not only for the sake of the UK, but also for the rest of the EU.

## London-EU Interdependence

Today, the City and Europe rely on each other more than ever. According to the CEBR's report, *The City's Importance to the European Union Economy*, almost 70,000 jobs in the City of London depend on business with other EU countries. However, it is estimated that almost 200,000 jobs across the EU rely on London's position as a global financial centre.

The CEBR predicts that the EU's GDP would be €28 bn per annum lower, if business were to be spread more evenly across Europe. The impact would obviously be felt in the UK, but countries such as Germany, Luxembourg, France and Belgium would also suffer lower economic growth and a significant drop in employment in the financial sector. The costs of investment banking in Europe would increase dramatically and billions of euros worth of activity would be liable to go to cheaper, competitor markets



outside the EU. Other centres would not enjoy the economies of scale that accrue to London due to the high concentration of investment banking activities in the City – benefits such as highly skilled labour, clusters of customers and of course large financial markets with globally competitive rates of liquidity and high levels of specialisation. Such benefits are highly prized, as illustrated by the high number of foreign banks located in the City, of which over 100 are EU based.

The evidence to date is that the City has not lost ground to other EU financial centres since the launch of the euro. In 2001, investment banking and related activity in the UK was worth an estimated €63.5 billion – this is well over three times the size of the EU's second biggest market, Germany. In addition, over the past decade, London has maintained or increased its market share in most global financial markets.

Of course, competition between financial centres is healthy, but co-operation is crucial. As can be seen, the whole of Europe is richer and supports more jobs thanks to the success, strength and adaptability of the City of London. If the City were to lose its European pre-eminence the EU would pay a high price.

#### Concluding Observations:

The City must stay successful and success cannot

be left to chance. The Corporation of London has successfully served the City over the centuries and remains dedicated to its sustained and expert promotion.

The world of finance is fast moving, yet London stays ahead of the pace. It is sensitive to the pulse of the international market place, because it is at the heart of it. The City is ever ready to maximise the possibilities offered by new opportunities. This has been illustrated most clearly with the City's market leading performances since the launch of the euro. The City was a global business leader prior to the introduction of the single currency, and remains so today. It is vital that it retains this position, for the well-being of the UK economy and the European Union as a whole.

*(The author is the Chairman of the Policy and Resources Committee of the Corporation of London, provider of local government services to the City of London. She is also City and Business Advisor to the Mayor of London, Ken Livingstone, and a board member of the London Development agency and International Financial Services London).*

For further information, please contact the Economic Development & Education Office, Corporation of London, PO Box 270, Guildhall, London, EC2P 2EJ. email: econ.dev@corpoflondon.gov.uk Please visit the Corporation of London's web site: <http://www.cityoflondon.gov.uk>.

#### The Recent Trends in Equity Prices

Year/Month	BSE Sensitive Index (Base: 1978-79 = 100)			S & P CNX Nifty* (Base: Nov. 3, 1995 = 1000)		
	Average	High	Low	Average	High	Low
1999-00	4,659	5,934	3,245	1,369	1,756	931
2000-01	4,270	5,542	3,541	1,335	1,625	1,125
2001-02	3,332	3,742	2,600	1,077	1,198	854
March 2001	3,808	4,272	3,541	1,214	1,358	1,296
June 2001	3,439	3,558	3,319	1,107	1,148	1,067
Sept. 2001	2,918	3,232	2,600	949	1,048	854
Dec.2001	3,315	3,443	3,132	1,076	1,115	1,020
March 2002	3,581	3,690	3,459	1,159	1,193	1,123
June 2002	3,257	3,362	3,161	1,066	1,097	1,040

Sources: (i) The Stock Exchange, Mumbai  
(ii) National Stock Exchange of India Ltd.

\* NSE-50 i.e. Nifty has been rechristened as 'S& P CNX Nifty' with effect from 28<sup>th</sup> July, 1998



## BFSI should Adopt IT for Efficiency

- Mr. Arun Kumar



There is no doubt, whatsoever, that what Wall Street is to US, Mumbai is to India. Over the years, Mumbai has consolidated its position as the country's financial capital. Mumbai has all the makings of an international financial centre in terms of providing specialized financial services on a global scale and

enhancing transformation to a high value, service based economy.

Mumbai's position as the premier financial destination is based on the dominance of its two stock exchanges – the NSE and the BSE – and the power of its Banking and Financial Services Industry (BFSI). The city has the largest commercial and retail banking centre in India, and attracts the lion's share of Mumbai's incoming foreign investment.

Having already established itself as the financial capital of India, Mumbai would need to build upon the advantages it already has, and work on a strategy to emerge as a regional financial centre. Indeed, to be successful in today's competitive environment, it is imperative for organizations in the financial services sector to embrace Information Technology (IT) and redefine relationships with customers, partners and suppliers.

The reforms in the 1990s, which led to expansion, consolidation and liberalization of the banking and financial sector in India, brought in many changes and challenges. A number of private and foreign players entered the Indian market with superior technologies that helped them service their customers efficiently through multiple channels such as ATMs and online banking. Indian banks on the other hand have been using IT more out of compulsion and primarily for transaction processing. They now need to adopt IT to reposition banks into the integrated financial services market.

Computerization in Public Sector Banks		
	Sept. 2000	Mar. 2002
Branches networked	45,837	46,387
of which :		
Partially computerized	13,802	15,466
Fully computerized	5,514	11,578
ATMs installed	320	1,969
Number of PCs/Nodes	95,090	1,65,986

The need for providing improved customer service, reducing transaction costs and increasing productivity, shall be the main drivers for the BFSI sector to adopt IT. These considerations are particularly important for public sector banks in India, who are facing immense competition from private and foreign banks. IT can help them move from the present scenario where they are working as isolated islands to providing a centralized banking experience. There is a need today for IT and the financial community to come together and develop customized IT solution to make the Indian BFSI sector globally competitive.

Adoption of IT in the banking sector will provide real time availability of transaction processing through multiple channels. It would enhance a bank's ability to cross sell products, ensure better management and security and safety of funds and increase efficiency through integration of systems across various locations. It would also ensure efficient management of NPAs, minimize transaction costs, enhance ability to conduct in-depth financial analysis and gather business intelligence. Enhanced use of IT would also encourage the use of Internet to provide access to online bill payments, transfer of funds and e-statements in addition to encouraging wireless mobile banking and e-commerce.

With growing competition faced by foreign banks and financial institutions, the public sector banks in co-operation with the Indian IT industry needs to equip themselves for the next phase of introducing the benefits of IT to their customers by providing a centralized banking solution. To achieve this objective, banks should spend a minimum of 5% of their total spending in the medium-term on IT. As per the NASSCOM's estimates, IT in BFSI will account for over 25% of domestic IT industry revenues by 2005.

What is encouraging to note is that the process has already begun. According to the NASSCOM survey, IT implementation in public sector banks has been commendable over the past two years. The number of fully computerized branches has increased from 5,514 in September 2000 to 11,578 in March 2002 and the number of PCs/nodes increased from 95,090 to 165,986.

For those Indian IT companies who have made considerable inroads in the BFSI sector



internationally, this would provide an opportunity to extend their expertise for tapping the huge opportunity that exists in the domestic market. The segment also offers great potential for the SME sector for developing customized financial products and services.

**Opportunities for Indian Software and Services Companies in the BFSI sector**

- IT Networking
- Systems Integration and Management
- Customer Relationship Management (CRM) Applications
- Back Office processing and Call Centres
- Data warehousing/ Data mining
- Mobile and e-banking

NASSCOM will play the role of a catalyst and bridge the gap between the financial and IT community.

NASSCOM in association with various regulatory and industry bodies such as the Indian Banks' Association will initiate a survey on best practices of IT implementation within India and overseas. This can then be used as the benchmark for implementing IT solutions within the BFSI sector. The apex body also plans to create a comprehensive database of IT applications available for the BFSI sector that could be used as a ready reference for implementation. Since NASSCOM enjoys a robust relationship with the Ministry of Communications and Information Technology, it would work towards creating standards for smart cards that would enable sharing of credit information. NASSCOM would also work with the industry to assist the BFSI sector to provide specialized financial IT training modules to its executives and identify joint collaborative opportunities between the Indian BFSI sector and IT companies.

*(The author is the Chairman, National Association of Software and Service Companies (NASSCOM))*

## How IT is Transforming the Banking Industry & Stock Market Activities

- Mr. S. Balasubramanya



The financial sector comprising banks, stock exchanges and insurance organizations have been the backbone of every country. They are the agents to implement and bring about economic reforms. Any changes in this sector through technology will have sweeping impact on the country. We have seen significant contribution of

technology on the stock markets in the last decade with the introduction of electronic trading, settlement and depository. With the introduction of large-scale automation in stock markets, the cost per transaction to the investors and other intermediaries in the market has come down significantly, besides, bringing total transparency in market operations. Despite this transformation, we have seen scams emanating from the market, and invariably these are linked to the banking sector. In many instances, such scams have unearthed irregularities in the banking sector, resulting from insufficient and/or inaccurate information. It has also brought to the fore the need for comprehensive automation in the banking sector.

Automation in the banking sector has come a long way in the last two decades starting with the

Rangarajan Committee report on banking sector reforms during the eighties, followed by reports of Narasimhan and Vasudevan Committees in the nineties. Though the pace of automation among banks is varied, the new private sector banks set up during the nineties have shown the advantages of comprehensive and integrated automation in the banking sector. However, these banks form a very small percentage of our total banking sector and as such have very little impact on the overall banking sector. With over 65,000 branches of banks in the country (public, private and the cooperative sector), percentage of branches covered by automation is very low. Though many banks have claimed that over 70% business is automated due to the enforcement of CVC guidelines, in reality it is much lower, as many functions in each branch is still done manually or with partial automation. Hence, there is significant amount of automation work that needs to be achieved in the banking industry.

### Drivers for Large Scale Automation

With liberalization in the telecom industry and its improved reliability with reduced cost, many banks and financial sector organizations are going forward with large scale networking of their branches and implementing centralized core banking solutions. As



a result, banks are able to provide their products and services to their customers anywhere, any time. With these developments, bank customers have been able to avail of these services across different locations with improved transaction realization and reduced cost. With increasing proliferation of ATMs, deployment of telebanking and availability of Internet banking facilities, the customer contact points have increased enormously, thereby resulting in increased services to customers. This has been possible solely due to the implementation of technology.

The regulator also needs to be well-equipped to play a significant role in the post-technological era. In India, RBI has played a catalyst role by setting up guidelines for banks' automation. In addition, it has also embarked upon large-scale automation projects within the RBI. Recently, the RBI, through Institute for Development & Research in Banking Technology (IDRBT) has rolled out a Structured Financial Messaging System (SFMS) for Indian banks to provide electronic money transferring facilities within and across banks, and the RBI. As this has been developed indigenously, there is no foreign exchange outflow from banks to avail of this service. Further, RBI has also completed the automation of the Public Debt Office (PDO), Negotiated Dealing System (NDS) for the secondary market of debt instruments along with its clearing by the Clearing Corporation of India Limited (CCIL). It has also embarked on deploying Real-Time Gross Settlement (RTGS) system for effecting settlement in the banking industry. In addition, CCIL has also embarked upon the trading and net settlement of foreign exchange transactions in the country.

### Technological Challenges Ahead

What has been achieved so far is only a modest beginning and many more industry wide projects are in the offing. In addition, banks are yet to complete major technological up-gradation of their systems. They are yet to see the real benefits of the technology. However, the implications of large-scale technological usage are paramount for a robust and proven disaster capability. When banks depend on technology for their day-to-day business, the complexity and risks of technology have to be understood and sufficient backup plan put in place to ensure continued customer service. In addition, as more technology based services are provided, the demand from customers will keep increasing and banks would thereby end up in a technology war. In order to win this war, investments in technology are going to increase and proper utilization of these investments is essential for banks to ensure that the systems deployed are fully integrated with their operations.

With more and more centralized core banking solutions being deployed by major banks, there is a strong felt need to provide a comprehensive telebanking services either from a single location or from regional locations based on customer language preference. Further, a significant amount of back office processing can be centralized, relieving the branch staff for more customer interactions. This is expected to bring in large-scale economies of operations and better customer services.

### Technology Is No Cure For All Problems

Though technology is a change agent, it will not be a cure for all inefficiencies. The key area of attention for banks is going to be the re-skilling of the workforce, both in technology and non-technology areas. One of the major areas where re-skilling is needed is in the area of customer service and customer focus; how to manage customer expectation, his feedback and customer complaints; how to attract new profitable customers; how to package products and services to meet his needs, create a hygienic branch environment and other contact points. Another major need is to ensure consistent customer experience, irrespective of the channel used for interaction with him. Added to this is the security across all channels and distribution points for customer information and transactions.

While technology may not be a cure all, it is definitely an enabler. The tool has to be used efficiently and effectively to derive maximum benefits. This will definitely be a differentiator to offer products and services.

### Conclusion

Mumbai being the financial capital of the country will always set the pace of automation in the banking and financial services industry. It will also take the lead in deploying large-scale systems and reap the benefits. Several banks, (RBI, SBI, BOB, BOI, CBI, Dena Bank, ICICI Bank, UTI Bank, etc.,) with their headquarters in Mumbai, are already setting the pace of technology deployment. They have set an example of how technology based transformation is delivering enhanced customer value. It is only a matter of time before the Indian banking industry witnesses enhanced technology deployment. With that customers are assured of better service from the banking industry. This would ensure better services to customers and also reduce the incidence of frauds or scams in the banking industry.

*(The author is the Vice President, Tata Consultancy Services and the views expressed here are his personal opinions and not the views of the organization he represents)*



# Importance of Mumbai's Stock Exchanges

- Mr. Arjun C. Marphatia



## Introduction

Bombay (rechristened, Mumbai) has always been the financial capital of India. The Bombay Stock Exchange (BSE) and the recently established National Stock Exchange of India (NSE) both have their headquarters in Mumbai.

The BSE was established in 1875 and is the oldest in Asia. It was formed as "The Native Share and Stockbrokers Association" (a voluntary non-profit making association), and has evolved over the years into its present status as one of the two leading stock exchanges in India. Until recently, it was a broker managed exchange. It plans to demutualize and convert itself into a corporate entity with management clearly separated from the ownership.

In contrast, the NSE was established as a corporate body in 1993 with the primary objectives of ensuring nationwide electronic trading, high levels of transparency and faster settlement cycles. Since its inception, the exchange is demutualized with ownership, management and trading resting in the hands of three different sets of people. The NSE has been playing a catalytic role and has significantly contributed to the reforming of the secondary markets in India, in terms of microstructure, market practices, trading volumes and use of state-of-the-art technology. In particular, the use of satellite communication technology for trading, using Very Small Aperture Terminals (VSATs) enabled NSE to rapidly expand its operations across the length and breadth of the country.

Subsequently, BSE was granted the requisite permissions and expanded its trading facilities to the remote corners of the land.

## Importance of Stock Exchanges

Much has been written about the relevance and importance of the stock exchanges in the economy. However, even at the cost of repetition some salient features are highlighted here.

- One of the key advantages of stock exchanges is that they are an efficient medium for raising of resources and channeling savings from the general public by way of issue of equity / debt capital by joint stock companies which are listed on the stock exchanges.

- The second main benefit is the wide-spread dissemination of information and the need to disclose adequate information – not only the quarterly or year end financial results but also major events which have an impact on the working of the company.

## Technology at NSE and BSE

### NSE:

TATA Consultancy Services (TCS), a division of TATA Sons Ltd., was selected as the prime contractor and system integrator by the NSE to provide a total turnkey solution for the money market and capital market's floorless trading system. The aim of the project was to enable NSE to provide nation-wide electronic trading with highest transparency in the market place. TCS gave a solution using the Client-Server architecture, fault tolerant computing and In-memory database, which gave the NSE high visibility and impact.

TCS also developed the local and nation-wide clearing and settlement system to run in ORACLE RDBMS environment. For the year 2001-02, the National Securities Clearing and Settlement System (NSCS) processed settlements for over 172 mn. trades with a turnover of around Rs 508,121 crores. TCS has also developed the Trading, Clearing and Settlement system for NSE's Futures and Options segment. In the year 2001-02, nearly 4.2 mn. contracts traded on NSE Futures and Options system with a notional turnover of Rs 101,925 crores.

	Volume of Trades /Contracts (nos.)	Average Daily Turnover (Rs. Cr.)
NSE-Equity	21,100,000	2,235
NSE-Derivatives	1,155,897	1,322
BSE-Equity	14,487,000	1,161
BSE-Derivatives	3,283	3
July 2002		

### BSE:

The Bombay Stock Exchange On-line Trading System (BOLT) is designed and developed by the CMC Ltd, now a TATA group company. This 'screen based trading system' replaced the manual 'out-cry method of trading' in the ring. It went live on March 1995.



This enabled the BSE in providing floorless and fully automated screen based trading facilities in capital market instruments with an equal access to investors all over the country. At present, BSE, with around 685 members, has seen an average daily turnover of Rs 1,162 crores in July 2002.

For further expansion of its activities BSE has decided to provide a 'web based trading facility' to its members as it was felt that Internet trading would fundamentally change the way exchange and brokers interact with their customers. TCS developed the system (BSE WebX) with an objective of enabling the exchange to service its members and the customers of the members in an efficient and cost effective manner using the Internet.

### **The Importance of BSE & NSE to Mumbai**

In most major industrial cities all over the world, where businesses were evolving and required investment capital to grow and thrive, stock exchanges acted as the interface between suppliers and consumers of capital. Mumbai, being a major industrial centre, is no exception. Indeed, BSE has made a major contribution to the industrial and economic development of Mumbai. Both these exchanges have had a positive impact on Mumbai.

First, taxes and other statutory charges paid by NSE and BSE are substantial and make a sizeable contribution to the Government exchequer. For example, transactions on the stock exchanges are subject to stamp duty, which is paid to the Government of Maharashtra. The annual revenue from this source ranges from Rs 75 – 100 crores.

Second, employment generation from the operation of exchanges is significant. Brokers used to employ a large number of Mumbai's citizens in their offices, especially for settlement work, as large quantities of share certificates and other documents, had to be physically counted, stored, sorted and delivered. Before electronic trading a number of sub-brokers executed orders on the trading floor and hordes of investors used to visit the exchange.

Third, the operations of stock exchanges also resulted in the creation of indirect employment through the evolution of simple homegrown service providers, like the Angadia service, (a courier service peculiar to Mumbai and Gujarat) which was in existence decades prior to the advent of the modern day courier service. Stockbrokers routinely utilize (yes, this is very much in vogue even today) these services to deliver securities and blank transfer forms as well as other documents valued at thousands of crores of rupees through this Angadia Service.

Fourth, the Securities and Exchange Board of India (SEBI), modeled on the lines of the SEC in the USA, also has its headquarters in Mumbai. Both the National Securities Depository Ltd. (NSDL) and the Central Securities Depository Ltd. (CDSL) have their head offices located in Mumbai.

Last, with the opening up of the financial markets to foreign investors a number of foreign institutional investors and brokers have established a sizeable presence in Mumbai.

### **Future Outlook**

With increasing globalization and consolidation amongst exchanges, the future of the regional stock exchanges, around 22 in India, is likely to be very uncertain and even their very survival is a major question mark. SEBI has permitted these regional exchanges to form subsidiary companies, which are akin to super stockbrokers. These companies have acquired membership of both the BSE and NSE at confessional entry fees and permitted their members to trade on the BSE and NSE, thus, increasing trade volumes and business in both BSE and NSE.

The stock markets of the future will have a redefined purpose and reinvented architecture due to the advent and widespread use of technology. Information and stock price quotations are available almost instantaneously, and, more importantly, investors can act on this data by executing a trade from anywhere at any time. This new market will bring benefits to the investors, the listed companies, and the economies of countries. Trading will become cheaper, faster and settlement will be simpler and with reduced risk. Raising capital for companies will become easier, thereby contributing directly to economic growth.

Surely, in this new era of investment, leaders will be the ones willing to be the agents of change. If stock markets are steered in the right direction, they will become even better vehicles of investment opportunities and job creation.

Already, both the exchanges, BSE and NSE, have shown their proactive responses by increasingly using leading edge technologies to effectively compete in the global environment. In the not too distant future, once full capital account convertibility is permitted in India, one could well witness an expansion of trading volumes and its resultant economic benefits to the thriving and ever young metropolis of Mumbai.

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*(The author is Manager (Systems) at Tata Consultancy Services and the views expressed above are his personal opinions and not the views of the organization he represents)*



## Emergence of Securities Depositories in India

- Mr. Ravi Shah



The global securities market is passing through an interesting phase. Driven by globalization, technology innovations and increasing trade volumes, the financial industry is moving towards Straight Through Processing. In this globalization era led by major financial

markets, you may wonder where does India fit in. Before making any judgment, it is worthwhile to quote the Securities Industry Association (SIA) of USA, in arguing the case of dematerialization in the world's biggest securities market, i.e. United States of America:

*"Some of the latecomers to the capital markets have leap-frogged into the next century by rapidly moving into the dematerialized status already or at least very soon. Among these would be ...India."*

Unbelievable! When we compare this statement with the following one made by an international magazine covering clearing and settlement in the global securities markets not very long ago.

*"India's financial markets, unlike the country itself, have long conjured up images of interminable delays, infuriating obstructions and an infrastructure that belongs more to the 19<sup>th</sup> than the 20<sup>th</sup> century. The country has long been a safekeeping and settlement nightmare; the country's sub-custodians struggling gamely – if ultimately pretty ineffectively – to deliver a consistent level of service to clients. Bugged down by lack of liquidity, entry restrictions on foreign participants, heavy transaction costs and frankly painful registration processes, any talk of the markets' supposed liberalization back in the early nineties rings decidedly hollow."*

When we look at the above two statements, the first being the recent reference, one realizes that things have changed dramatically in the securities market for better, as far as India is concerned. No longer the taboo of bad deliveries, payment delays, paper movement and slower settlement. The two entities, which can among others claim, a major credit for improving the market efficiency of the Indian Securities market are National Securities Depositories Ltd. (NSDL) and the Central Depository Services Ltd. (CDSL), both established in Mumbai.

In 1996, the Indian Government passed the Depositories Act allowing the establishment of

securities depositories in India. The principle function of a depository in the Indian context is to dematerialize securities and enable their transaction in book-entry form. In simple terms, the depository provides the following functions:

- **Dematerialization:** It is the process of converting securities in physical form into holdings in book-entry form.
- **Rematerialization:** It is the process of converting securities in electronic form into holdings in physical form, for those investors who opt to move out of the depository system.
- **Account Transfer:** The securities are transferred by debiting the transferer's depository account and crediting the transferee's depository account.
- **Pledge and Hypothecation:** Depositories allow the securities placed with them to be used as collateral to secure loans and other credits. The securities pledged / hypothecated are transferred to a segregated or collateral account through book entries in the records of the depository.
- **Linkages with the Clearing System:** The clearing system performs the functions of ascertaining the pay-in (sell) or payout (buy) of brokers who have traded in the stock exchange. Actual delivery of securities to the clearing system from the selling brokers and delivery of securities to the buying broker is done electronically by the depository. To achieve this, the depositories and clearing system are electronically linked.
- **Corporate Actions:** The depository may handle corporate actions in two ways. In the first case, it merely provides information to the issuer about the persons entitled to receive corporate benefits. In the other case, depository itself takes the responsibility of distribution of corporate benefits.

Mumbai, being the financial capital of India and hub of stock market activities, was the natural choice for establishment of depositories. NSDL was registered as a depository on June 7, 1996. The depository commenced operations in November 8, 1996 by implementing a state-of-the-art technology system in record time. NSDL operates as a for profit institution and is owned primarily by the IDBI, UTI, NSEIL, SBI with several other Indian and Foreign Banks having a small shareholding.



Bombay Stock Exchange (BSE) established the CDSL in 1998, which commenced operations on March 22, 1999. CDSL is a public company for profit, and is owned by the BSE, Bank of India, Bank of Baroda, SBI, HDFC Bank, Centurion Bank, and Standard Chartered Bank, Bank of Maharashtra, Union Bank of India, Calcutta Stock Exchange and other depository participants.

The changes in the last five years, thanks to the two major infrastructures, NSDL and CDSL, that have changed the face of the Indian capital market. Gone are the days of paper deliveries and the related issues of bad deliveries. The settlements through book entry transfer of securities have removed the major problem of bad deliveries, delays in settlement and the related cost in the settlement. International norms of rolling settlements have been introduced and well adapted to the Indian market conditions. With effect from April 2002, the system of settlement in the Indian capital market has moved to T+3 settlement. Both the depositories have faced the challenges of T+3 effectively and efficiently. With these changes, the settlement system in India has been completely overhauled. The move from an Account Period settlement in "paper form only" to a T+3 settlement in pure electronic form has been achieved in a record span of under 5 years, whereas it took anywhere between 10 - 20 years in most of the developed countries.

Today, Indian settlement infrastructures have been built to meet the requirements of the 21<sup>st</sup> century. Everybody will envy the settlement infrastructure, wherein 99% of the settlement in the country takes place in the dematerialized way. Even the developed capital markets are struggling to achieve this. Improvements that have taken place in the Indian capital market have been the model for others to emulate.

As on August 2002, the statistics of NSDL is impressive:

<input type="checkbox"/> Companies Available for Demat:	4,464
<input type="checkbox"/> Companies Signed for Demat:	4,510
<input type="checkbox"/> Debt Instruments Admitted for Demat:	4,767
<input type="checkbox"/> Commercial Papers Admitted for Demat:	619
<input type="checkbox"/> Depository Participants of NSDL:	213
<input type="checkbox"/> Depository Participant Service Centre Locations:	1,718
<input type="checkbox"/> Active Client Accounts (in thousands):	3,797
<input type="checkbox"/> Demat Custody (Qty. in crores)	6170
<input type="checkbox"/> Demat Custody (Value in Rs.crores.)	478,845

Mumbai, being the financial capital of India has its own share in the success of depositories. The number of investors accounting from Maharashtra (no doubt major portion of this is from Mumbai) alone is more than 30 percent.

Not far behind is the CDSL, which too has equal number of companies whose shares are available for

Demat. CDSL also has 1710 debt instruments available for Demat. CDSL services investors through its network of 176 Depository Participants.

This impressive result is a reflection of a campaign that involved:

- Strong government, regulatory and stock exchange support – the Minister of Finance, Securities Exchange Board of India (SEBI), and Reserve Bank of India (RBI) openly promoted the depository and provided supportive regulatory changes (e.g., SEBI's introduction of compulsory dematerialized settlement only in a growing number of securities starting in 1999 and RBI's increase in permitted lending limits against dematerialized securities pledged).
- Depository Participant (DP) supports as DPs saw not only the benefits of reduced paper, but also new clients and the ability to cross-sell a growing number of products/services to them.
- An aggressive investor communications programme (publications, seminars, website, videos, TV "infomercials" and credible spokespeople from across a spectrum of backgrounds - academics, business writers, government/regulatory officials) and provision of an active grievance redressal mechanism.

Both the depositories have successfully deployed technology for the full benefit of the ultimate stakeholder i.e. the Indian investor. Today, making use of Internet, these depositories provide user-friendly features, which provide complete control to the investor in the settlement process.

In line with global trends, further steps are being taken to implement the world's best practices. The planned implementation of an Electronic Contract Note System is the first step towards "Straight Through Processing", which is aimed at enabling a move from T+3 to T+2 settlement. Additionally the implementation of RTGS (Real Time Gross Settlement) system, planned for implementation in the near future, will improve the payment side of settlement. With all this sophistication and modernization that is taking place in the securities market, related to exchanges, clearing & settlement, Depository Participants, brokers, etc., the day is not too far when the Indian securities market will be recognized as one of the well developed markets in the world.

TATA Consultancy Services (TCS), which was entrusted with the responsibility of implementing the NSDL depository solution, based on its earlier state-of-the-art solution implementation at SIS, SegInterSettle, Switzerland, is working closely with NSDL in constantly bringing the benefits of its global securities experience to the Indian securities market.

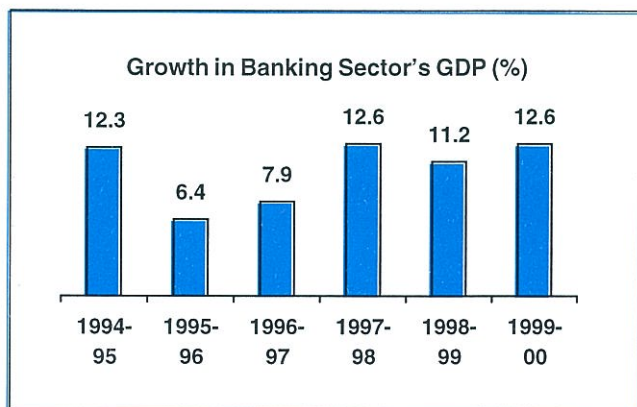
*(The author is the Vice President, Tata Consultancy Services and the views expressed here are his personal opinions and not the views of the organization he represents)*



## Evolution and Outlook for Banking in Mumbai

Financial intermediation industry in general, and the banking industry in particular, play a vital role in the economy. On the one hand, spread and efficiency of the banking sector acts as a catalyst for the industrial and economic development; and on the other, it also touches the day-to-day life and transactions' experience of the common citizens. In case of Mumbai, the sector assumes even greater importance, because Mumbai is virtually the 'banking capital' of India.

In this article, we would, therefore, concentrate on various banking sector developments, with a special emphasis on this sector in Mumbai. To set the perspective, we provide a brief overview of the banking sector in India - its evolution and performance. Thereafter, we describe some aspects of the banking sector in Mumbai. Keeping in view some inherent data limitations, it has become imperative to rely on some general impressions based on our discussions with banking professionals. And finally, we dwell on recent fascinating developments shaping the industry and indicate the likely directions for the future.



### Brief Overview of the Sector

The evolution of the banking sector in India is generally divided into three distinctive phases: (a) pre-nationalization period; (b) post-nationalization period; and (c) the post-liberalization period. In the pre-independence period, the modern banking sector was driven by banks in the private sector and was substantially dominated by foreign banks. Though the industry operated largely in the areas of financing foreign trade and bills of exchange, it was not wide spread enough to make a significant dent into the informal financing sector.

In the post-independence period, there were two major turning points: First, the establishment of

State Bank of India following the nationalization of the then Imperial Bank of India in 1955; and second, the nationalization of 14 private sector banks in 1969. Thereafter, until the early nineties, the public sector banks dominated the development of banking in India. During this period, the banking industry spread into far-flung areas of the country and became an engine of economic development.

However, during this developmental phase, certain inefficiencies crept into the banking sector. Very often, loans were extended without due consideration to the creditworthiness of the borrowers. After 1991, urgency was felt to give greater autonomy to public sector banks and encourage greater participation of private sector in the banking industry.

#### Post-reforms policy changes :

- Deregulation of interest rates
- Gradual reduction in Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR)
- More transparency in accounting standards
- Stricter capital adequacy and provisioning norms
- Prudent norms of exposures, gradually converging to the international standards.

The liberalized policy framework, together with vigorous response, especially from private sector banks, have led to a sharp growth of the banking industry during the nineties. The banking industry used to account for 1.8% of India's GDP in 1993-94. But latest data shows that the share has gradually increased to 2.2% by 1999-00. Indeed, the sector has clogged a double-digit growth in value addition in recent years. During the nineties, aggregate deposits of banks increased at a CARG of 17.2%, while bank credit increased at 15.9% per annum. Of course, it is true that the credit-deposit ratio of the banking industry has fallen in the last few years—from over 60% at the beginning of the nineties to about 53% now. This is a reflection of the increasing risk aversion of banks because of the growing concern about prudential norms. However, some would consider this concern to be auguring well for the future of the banking sector.

### Banking Sector in Mumbai

Against this backdrop, we now turn to the developments of banking in Mumbai. History of the organized banking industry in Mumbai can be traced



back to the nineteenth century. The Bank of Bombay, set up in 1840, was one of the three presidency banks. While Bank of Calcutta was established much earlier, the third presidency bank-Bank of Madras-was set up in 1843. These three banks remained at the apex of modern banking in India till their amalgamation with the Imperial Bank of India in 1921. This bank was nationalized and reconstituted as State Bank of India (SBI) in 1955.

If Mumbai missed the honour of hosting the first commercial bank in the country, it had the honour of being a host to the Reserve Bank of India (RBI)-India's central bank-since its inception in 1935. Mumbai's banking scenario is, indeed, dominated by the overwhelming presence of the RBI, SBI (the largest commercial bank) and a host of private banks and foreign banks. Mumbai is also home to the largest stock exchanges and SEBI, the regulator of stock markets in India. The banking industry and stock exchanges have really complimented each other in nurturing the tremendous growth of the financial sector in the metropolis.

Witness Mumbai's prominence in the Indian banking industry:

- With bank deposits of over Rs 141,800 crores in March 2002, Mumbai accounts for about 13% of the total bank deposits in India. Delhi follows, with 10.7% of total deposits.
- Mumbai's dominance in bank credit is even more striking, contributing a whopping 26.5% to the total credit. The other three metros, viz., Delhi, Kolkata and Chennai collectively contribute to 24.8% of bank credit.
- The credit-deposit ratio of banks stood at 62.5% as at March 2002. For Mumbai, the ratio is more than double at 128%. This signifies that Mumbai has truly developed as a financial intermediation centre, rather than only being a deposit mobilisation centre.
- Banks in Mumbai channelise savings mobilized from rest of India, most of which are redeployed in economic activities in other parts of the country. This reflects the competitiveness of Mumbai in banking operations. In a sense, Mumbai turns out to be an 'exporter' of banking activities to the rest of the country.
- There are six nationalized banks, which have their headquarters in Mumbai, including that of the SBI. More importantly, about 8 Indian private sector banks-including HDFC Bank and ICICI Bank-have found Mumbai to be their natural capital in India. Almost all foreign banks in India, barring a handful, have their main offices in Mumbai.
- In terms of clearance of cheques, Mumbai's share is as much as three-fourths of the total clearances (or worth Rs. 756,600 crores in March 2002).
- Mumbai's presence is also overwhelming in the money market and forex markets, where banks are the major players. The city's share in the forex market is as high as four-fifths of the total turnover.
- Over the last few years, the boundaries between banking and other segments of the financial services sector are getting blurred. The two dominant stock markets in Mumbai (NSE and BSE) together account for about 92% of the turnover and virtually for the entire market capitalization of the corporate sector. Also, nearly 80% of the mutual funds in India are registered in Mumbai. Practically, all FII investments and over 90% of merchant banking transactions happen here.

#### Bank Deposits and Credit in Metropolitan Cities

	Amount (Rs. crore)		Share in all-India (%)	
	Deposit	Credit	Deposit	Credit
<b>March-91</b>				
Mumbai	28,605	21,839	14.3	17.6
Chennai	5,932	6,654	2.9	5.3
Kolkata	11,994	7,730	5.9	6.2
Delhi	19,079	10,460	9.5	8.4
<b>March-96</b>				
Mumbai	65,388	57,463	15.3	22.6
Chennai	12,504	13,870	2.9	5.4
Kolkata	17,659	13,562	4.1	5.3
Delhi	41,724	26,341	9.8	10.3
<b>March-02</b>				
Mumbai	141,837	181,158	12.9	26.5
Chennai	30,188	35,941	2.8	5.3
Kolkata	39,732	28,205	3.6	4.1
Delhi	117,890	105,329	10.7	15.4

Based on some crude estimates, Mumbai accounts for about 16-18% of the overall banking sector GDP in the country. Likewise, the banking sector's contribution to the city's economy is estimated to be around 12-13 per cent.

Interestingly, although the growth of bank credit in Mumbai is faster than at the national level in recent years, the growth of deposits is somewhat lower. In March 1996, Mumbai had a share of 15.3% in bank deposits, which has now fallen to below 13 per cent. On the other hand, the city's share in credit has increased over the same period from 22.6% to 26.5%.



The behaviour of growth of deposits in Mumbai is consistent with the typical experiences of more developed regions. It also reflects a growing competition from a variety of new saving instruments that have come into existence in recent years. Consequently, Mumbai's rate of growth of deposits has slowed down as compared to the all-India performance.

On the other hand, CARG of bank credit in Mumbai was 21% during 1996 to 2002. Interestingly, however, the share of industry in credit disbursed by banks in Mumbai has fallen quite sharply during the second half of the nineties—from 56% in 1996 to just 48.8% by March 2001. Within the industry, the share of manufacturing has declined even more rapidly.

### Changing Profile of Banks

The credit trends indicate the drying up of manufacturing investments in the country in general, and also the declining role of manufacturing sector in Mumbai's economy. Of the incremental credit disbursed from 1996 to 2001, the manufacturing sector received just a little over one-third. On the other hand, trade and financial activities, which together accounted for only one-fourth of the cumulative credit till 1996, grabbed 43% of the incremental credit in the next five years. There was not much change in the shares of other categories in credit. Notwithstanding the increasing importance given by banks to retail loans in recent years, the share of personal loans in total credit in Mumbai increased only marginally from 4.2% in 1996 to 4.5% in 2001.

Distribution of Bank Credit in Mumbai (%)		
	Mar. '96	Mar. '01
Agriculture	0.9	1.1
Industry	55.9	48.8
of which, Manufacturing	52.5	42.6
Transport Operators	0.5	2.7
Professional Services	3.1	2.9
Personal Loans	4.2	4.5
Trade	17.8	23.8
Finance	6.9	10.9
Others	10.7	5.3
Total	100.0	100.0

Apart from the trends outlined above, there are also some other significant changes in the banking industry in the last few years. These changes are reflections of the transformations in the activity profile of banks and technological advancements.

These have largely been driven by the private banks and foreign banks, although several public sector banks are now following suit. Based on anecdotal evidence, Mumbai seems to be at the forefront of these changes.

In recent years, banking is increasingly being viewed as a marketing activity too! Many banks have been attempting to become one-stop-shop for all financial (and sometimes even non-financial) needs of their customers, leveraging their large networks and relationship with customers. Banks are actively selling credit cards and debit cards, customized deposits, specially designed mutual fund schemes, depository services; and so on. In the near future, banks could be seen to be actively selling insurance products too, when some of the regulatory hurdles in this respect are sorted. In future, we would see further blurring of the distinction between banks and other financial services institutions.

### Technological Transformation:

Undoubtedly, telecommunication and information technology are making sweeping changes in the banking sector. These technological advances are helping banks to strengthen customer relationship and move towards 'relationship banking'. Customers are increasingly moving away from the confines of traditional branch banking and are seeking the convenience of remote electronic banking services.

The origin of electronic banking in developed countries can be traced back to the seventies with the installation of Automated Teller Machines (ATMs). Subsequently, other types of virtual banking services, like Shared ATM networks, Smart Cards, phone banking, and more recently, internet banking, have grown in prominence throughout the world. These changes have significantly improved the productivity of banks in terms of business per employee; and enhanced quality of service for the customers, who can bank from the comfort of their home. The new private sector banks have widely used this convenience banking as their USP in attracting high value customers.

Our day-to-day experience as a customer indicates that these developments have made a more prominent mark in Mumbai than in other parts of the country with its significant contribution to the productivity growth. For example, deposits per bank office in Mumbai are about 5.7 times and credit per bank office is over ten times the national average. Mumbai also scores better than the other three metros on these parameters.



### Directions for the Future

Surely, there is a promising future for the banking industry in Mumbai's economy. Indeed, we believe that the share of banking in Mumbai's economy would enhance further on account of:

- the presence of key financial sector institutions, and consequently, far better 'external economies'
- the substantive presence of private banks enjoying a lead in efficiency and productivity
- Mumbai's potential of being an International Financial Centre

Unlike, several other economic activities, the high cost of property is not a constraint for Mumbai's competitiveness in the banking sector. With phone banking, net banking and ATMs gaining prominence, this industry in fact, is using physical space very economically. Even otherwise, the banking industry is known to generate far higher returns per unit of land than the manufacturing industry.

Apart from these city-specific features, it is also worthwhile to reflect on the following factors, impacting the banking industry in general.

- The convergence of technology with financial innovations
- Redundancy of manpower due to technological progress; The wave of VRS speaks eloquently of the shape of things to come

- The expected albeit slow drive towards privatization of banks
- The prospect of consolidation thanks to the process of M&A activity, despite the current haziness on this core
- Unleashing of competitive environment through external compulsions, especially the negotiation on services sector of the WTO.

One major problem that the banks have faced in the last few years relates to the non-performing assets. Though the proportion of such assets is lower in the Indian banking industry by Asian standards, it is nevertheless worrying both the regulators and banks. In case of banks in Mumbai, the problem is likely to have been even more serious for two reasons: first, the higher credit deposit ratio of banks; and second, the high exposure of some banks to the manufacturing units in the past, which later turned unviable in several cases. The concern for NPAs is likely to persist for some more years.

On balance, the positives seem to outweigh the negative features of the banking industry in India, and more so in Mumbai. With the prospects of IFC in the not too distant future, Mumbai could truly leverage its strengths in the financial sector. All in all, it is going to be a fascinating and challenging time awaiting the banking industry for the city.

*(Prepared by the Secretariat of Bombay First with substantive inputs from Mr. Mangesh Soman)*

**Credit-Deposit Ratio of Select Metros**

(%)

Year ending March	2002	2001	1996	1991
Mumbai	128	93	88	76
Delhi	89	84	62	55
Chennai	119	123	111	56
Kolkata	70	67	77	130
All-India	62	58	60	62

Source: Banking Statistical Returns, Reserve Bank of India.

#### Notes:

- Credit and deposit data pertains to March ending of the respective year
- Mumbai's credit-deposit ratio has been steadily increasing since 1991 and is almost twice that of the All-India ratio in 2002



# Mumbai as a Banking Centre During Reforms

- Dr. N. Nagarajan



Mumbai has been the financial and commercial capital of India. It is usually compared with New York while New Delhi is treated as Washington D.C. of India. Since 1991, as part of the overall economic reforms, extensive reform measures relating to commercial banking

have been taken. The performance of banking in Mumbai during this reform period forms the subject of this article.

For the purpose of analysis, relevant data were culled from the Quarterly Handout of Banking Statistics, published by the RBI. The discussion is limited to trends in deposits and advances. The data used pertain to commercial banks, excluding Regional Rural Banks. The data for private sector banks are derived, and refer to old and new private sector banks, as also branches of foreign banks. The study covers the period 1993-94 to 2001-02.

## Setting the Perspective: Deposits Growth

Between end-March 1994 and end-March 2002, all-India aggregate deposits of all commercial banks rose at a compound annual rate of growth (CARG) of 16.5%, from Rs.309,618 crores to Rs.1,052,721 crores (Table 1). Deposits of Public Sector Banks (PSBs) rose at a CARG of 15.5%, from Rs.267,468 crores to Rs.846,760 crores. At the same time, deposits of private sector banks rose at a faster pace of 21.9% from Rs.42,150 crores to Rs.205,961 crores thanks mainly to a lower base.

In Maharashtra, the deposits growth was lower. All banks registered a CARG of 13.6%, from Rs.70,354 crores to Rs.194,971 crores. While the PSBs recorded a growth of 12.4%, (from Rs.49,802 crores to Rs.127,260 crores), the private sector banks showed a growth of 16.1%, from Rs.20,552 crores to Rs.67,711 crores.

Indeed, the trend growth rate in Mumbai was even lower. The CARG in deposits for all banks was 12.4% from Rs.55,690 crores to Rs.141,837 crores. The growth rates of PSBs and private sector banks were 10.9%, (from Rs.36,290 crores to Rs.83,181 crores), and 14.8% from Rs.19,400 crores to Rs.58,656 crores, respectively.

**Table 1: Key Growth Rates of Banks (1994 to 2002)**

CARG (%)	Public Sector	Private Sector
<b>DEPOSITS :</b>		
(a) All-India	15.5	21.9
(b) Maharashtra	12.4	16.1
(c) Mumbai	10.9	14.8
<b>CREDIT :</b>		
(a) All-India	15.8	29.7
(b) Maharashtra	16.5	34.1
(c) Mumbai	16.6	34.4

Consequently, the share of Mumbai in bank deposits in both all-India and Maharashtra has steadily declined. In respect of all banks on an all-India basis, the decline was from 18.0% in March 1994 to 13.5% in March 2002. The share of PSBs declined from 13.6% to 9.8% during this period. Surprisingly, with regard to private sector banks, the decline was very steep, from 46% to 28.5 percent (Table 2).

The share of Mumbai in bank deposits of Maharashtra exhibited a similar trend. The share of all banks fell from 79.8% to 72.8% during the period. While the share of PSBs declined steeply from 72.9% to 65.4%, that of private sector banks dropped from 94.4% to 86.6 percent.

**Table 2: Deposits: Percentage Share of Mumbai in Maharashtra and All-India (1994 to 2002)**

As on March 31	Public Sector Banks		Private Sector Banks		All Banks	
	All- India	Mahara- shtra	All- India	Mahara- shtra	All- India	Mahara- shtra
1994	13.6	72.9	46.0	94.4	18.0	79.2
1995	12.3	69.8	43.1	93.2	16.9	77.4
1996	11.8	68.2	42.6	93.5	16.4	76.3
1997	11.3	66.7	40.6	93.1	16.2	75.7
1998	11.3	67.5	34.9	91.3	15.5	75.3
1999	11.2	67.0	31.5	88.8	14.7	73.8
2000	10.5	66.0	30.4	88.0	14.1	73.2
2001	10.6	66.9	27.9	86.4	13.8	73.0
2002	9.8	65.4	28.5	86.6	13.5	72.8



In short, though Mumbai continues to be the topmost centre in aggregate deposits, its relative position has gradually eroded during the nineties. This trend may be attributed to two reasons: first, being the commercial and financial capital as also a metropolitan city, alternative avenues of savings like mutual funds are easily available. Hence, there could have been some diversion from deposits to such alternative financial assets; second, the changing face of industrial structure has created greater dispersal of work force. Several new centres of high-paid employment are emerging. Consequently, there has been diversion of resources from industrial centres like Mumbai.

### Growth of Bank Credit

Trends in the outstanding bank credit reveal a different picture. Between March 1994 and March 2002, total bank credit rose by 18.2% from Rs.174,910 crores to Rs.665,004 crores. While bank credit of PSBs recorded a growth of 15.8%, (from Rs.153,700 crores to Rs.495,429 crores), there was an increase from Rs.21,210 crores to Rs.169,575 crores or at as much as 29.7% for private banks. This differential performance of private banks could be attributed to their relatively low base (Table 1).

The credit growth for both Maharashtra and Mumbai was higher than that for all-India. In particular, private sector banks have given a very distinctive account of themselves by recording the highest growth rates in their credit portfolio. Thanks to this fast growth of bank credit, the share of Mumbai both in all-India as well as in Maharashtra has shown substantial increase. Thus, its share increased from 20.5% in March 1994 to 27.2% by March 2002 at the all-India level. Likewise, there was a quantum jump from 38.4% to 51.2% during the same period in respect of private sector banks. The share of Mumbai in Maharashtra, for all banks, rose from 82.2% to 86.5%, most of it being on account of the increased share of private sector banks (Table 3).

**Table 3: Bank Credit: % Share of Mumbai in Maharashtra and All-India (1994 to 2002)**

As on March 31	Public Sector Banks		Private Sector Banks		All Banks	
	All- India	Mahara- shtra	All- India	Mahara- shtra	All- India	Mahara- shtra
1994	18.0	79.5	38.4	93.1	20.5	82.2
1995	18.5	79.1	38.2	93.2	21.4	82.4
1996	17.7	78.1	41.0	94.6	21.7	82.8
1997	16.3	75.8	38.5	93.7	20.8	95.2
1998	18.6	78.3	35.1	92.4	21.9	82.4
1999	18.5	79.3	33.9	91.8	21.5	82.8
2000	20.2	81.2	36.5	91.4	23.6	84.3
2001	19.5	80.5	35.6	91.6	22.9	83.9
2002	19.1	80.0	51.2	94.8	27.2	86.5

From the foregoing analysis, it is evident that Maharashtra in general and Mumbai in particular, have continued to be the main users of bank finance. In this respect, Mumbai has not only retained its top position, but has also been improving its share.

### PSBs & Private Sector Banks in Mumbai

Aggregate deposits of PSBs in Mumbai stood at Rs.36,290 crores in March 1994 forming 65.2% of the total bank deposits in the city. Aggregate deposits rose to Rs.83,181 crores by end-March 2002. During this period, their share moved both ways with a downward bias. It reached the nadir of 58.3% in March 1997 and remained virtually stagnant thereafter. At the same time, there was a compensatory improvement in the share of private banks (Table 4).

**Table 4: Rising Percentage Share of Private Sector Banks in Mumbai (1994 to 2002)**

As on March 31	Private Sector	
	Deposits	Credit
1994	34.8	22.8
1995	38.1	26.4
1996	39.1	32.7
1997	41.7	37.0
1998	39.5	32.3
1999	37.7	31.2
2000	39.2	32.5
2001	37.2	33.4
2002	41.4	47.9

Trends in bank credit exhibited a more firm movement. The accentuated decline in the share of PSBs from 77.3 % in March 1994 (Rs.27,665 crores) to 52.1% in March 2002 (Rs.94,395 crores) was in contrast to the discernible upward trend seen in the case of private sector banks from 22.8% (Rs.8,145 crores) to 47.9 % (Rs.86,763 crores). Thus, there is reason to believe that, in Mumbai, PSBs are slowly but steadily losing their business in favour of private sector banks.

### Conclusions

In summing up, four crucial aspects of post-reforms banking scenario in Mumbai needs to be highlighted: First, Mumbai continues to maintain its top position in mobilizing bank deposits and extending bank credit. Second, in terms of mobilizing bank deposits, there is reason to believe that its predominant position is gradually slipping. Third, as for bank credit, Mumbai has not only maintained, but also improved its share. Finally, within Mumbai, private sector banks are slowly gaining ground at the expense of PSBs.

*(The author is the Chief Economist, Indian Banks' Association)*



## Mumbai: Premier Stock Market City of India

- Mr. R. G. Katoti



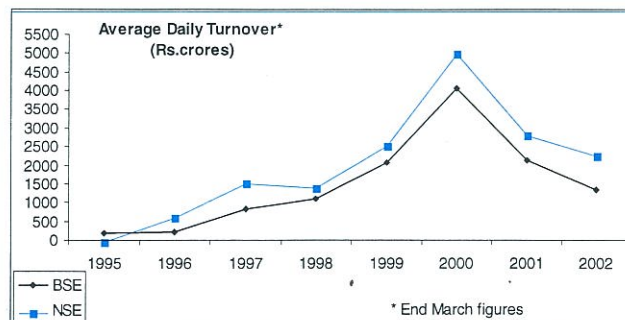
Mumbai is referred to as the financial capital of India. It also enjoys the status of being a pioneer in the development of Asia's oldest stock market, namely, The Stock Exchange Mumbai, that is, Bombay Stock Exchange (BSE). Established in 1875, BSE has bestowed Mumbai with an eventful stock

market history of 127 years. The city has witnessed the metamorphosis of BSE from a small group of individuals trading in stocks under a banyan tree to corporate brokers housed in the landmark multi-storied Jeejeebhoy Towers with the state-of-the-art technology; from 'out cry' quote driven system to 'screen based' order driven system; from a physical transfer of shares to electronic transfer through dematerialization; from fortnightly carry-forward system to T+3 compulsory rolling system; from trading only in shares to derivatives trading; from majority of individual brokers to majority of corporate brokers; and so on.

### Rivalry Between BSE & NSE:

For nearly 120 years, BSE enjoyed a lion's share in the country's share trading business. Over the Counter Exchange of India (OTCEI) has been too small to compete with BSE. However, with the establishment of National Stock Exchange (NSE) in 1994, BSE got a major business rival. Since the last eight years, both these exchanges have been competing with each other in terms of turnover, market capitalization, etc.

### Rising Dominance of NSE



With two predominant stock exchanges (BSE and NSE) under its fold, Mumbai accounts for a major share in several stock market performance indicators. Illustratively, in terms of total turnover, BSE and NSE together enjoy more than four-fifth share in aggregate turnover of 23 stock exchanges in the country. Also, they account for 18% of the total

number of registered brokers in the country. In terms of corporate brokers, their share is as high as 37 percent.



### Impact of Economic Reforms:

Prior to the economic reforms of July 1991, Indian stock markets remained highly controlled and insulated from the developments in the global markets. However, in the post-reforms period, the stock markets (mainly represented by BSE and NSE) have been exposed to the fluctuations in global stock markets. The markets have also witnessed the entry of new and powerful players in Foreign Institutional Investors (FIIs), who are influencing trends in the domestic markets. Simultaneously, Indian companies have been permitted to mobilize funds in foreign markets through Global Depository Receipts (GDRs) and American Depository Receipts (ADRs). Recent amendments allow two-way fungibility of GDRs/ADRs into shares and *vice versa*. All these measures have improved the depth and breadth of Indian stock markets.

In 1993, FIIs were permitted to invest in the Indian stock markets. So far, their cumulative net investment has been \$15.1bn. Statistically, there is no strong correlation between net equity investments of FIIs and the Sensex (correlation coefficient between these two variables during 24 months of 2000-02 works out to 0.16). But there are no two opinions about the psychological impact of FIIs' investment or divestment on overall market sentiments.

The effect of globalization on the Indian stock markets is better reflected in higher correlation between share indices of foreign markets and Indian markets. For instance, during 2000-01, correlation coefficient between Dow Jones Industrial Average (DJIA) and the Sensex was 0.33. It was even better between Nasdaq and the Sensex (0.49). For a longer period between April 2000 and March 2002,



correlation coefficient between the Sensex and DJIA was higher at 0.52.

#### Adapting to the changes:

Economic reforms have brought about profound changes in the pattern of economic growth, investment preferences and investment related risks. This has necessitated construction of new market indicators representing changes in the economy, and developing instruments for hedging market risks. Over the years, both BSE and NSE have successfully adapted themselves to changing times. Thus, we see the emergence of a full-fledged derivatives market for futures and options, construction of new broad-based indices such as BSE-200, BSE-Dollex, S&P CNX-500, certain sector specific indices, etc.

In order to keep the Sensex abreast of changing investor preferences from traditional commodity-based industries to brand-driven industries particularly in IT, communications and entertainment segments, BSE has changed the composition of the Sensex seven times between 1992 and 2002.

Following the recommendations of the SEBI on dematerialization, both BSE and NSE have dematerialized a large number of shares listed on them. At present, all the A-Group and a majority of regularly traded B1-Group shares on the BSE are dematerialized. Similarly, all the shares forming S&P CNX-500 index on the NSE stand dematerialized. A major advantage of this has been a drastic fall in bad delivery rate. For example, on the BSE bad deliveries as a proportion of net deliveries declined from 0.17% in April 1999 to 0.02% in March 2001. These figures for the NSE were 0.24% and 0.003%, respectively.

As both the premier stock exchanges of Mumbai have been flexible enough to adapt to the changes, it has been possible for them to earn profits unlike the other 21 stock exchanges in the country that incurred losses during 2001-02.

#### Issues & Challenges:

In the past, Indian stock markets, particularly the BSE have witnessed many booms and busts and weathered several crises. The Sensex, considered to be the barometer of the Indian economy, has fluctuated reflecting both market buoyancy and despondency. The amplitude of fluctuation in the Sensex has been relatively higher during the post-reforms period. Particularly in the last three years, the Sensex gyrated between the high of 6,151 (Feb.14, 2000) and low of 2,595 (Sept. 21, 2001).

An illustrative list of the critical events that affected the market sentiments in a major way along with the level of the respective monthly average of the

Sensex is shown in the table. With every critical event, the BSE and NSE have grown stronger in terms of institutional set up, regulatory mechanism, investor protection, operational transparency *et al.* Yet, there are many areas where improvements are needed. Illustratively,

**(a) Higher number of non-traded companies** – out of nearly 10,000 companies listed on BSE, a majority of them are not traded regularly. In March 2001, only 26% of 9,810 listed companies on BSE were traded. Further, out of the total traded companies, over one-fourth were traded for less than 10 days in a year.

**(b) Recurrence of financial irregularities**—in the last ten years, two major scams and a couple of minor scams have hit the market badly. Effective internal checks and balances leading to more transparent operations of the exchanges are desirable over and above the external regulation of SEBI.

**(c) Making the Sensex more active**—the share of the Sensex (comprising 30 sensitive scrips) in aggregate market turnover has substantially declined from 53% in July 2001 to 30% in July 2002.

Past experience of over one and a quarter century, professional approach of the management, flexible policies, etc., should see Mumbai's twin exchanges, namely, BSE and NSE overcome their weaknesses and grow stronger in future. Indeed, one can envision the prospect of Mumbai becoming a favourite global listing destination like Luxembourg!

Critical Events of the 1990s that affected the Sensex

Event	Period	Monthly Sensex
Beginning of NEP	June 1991	1,295
Financial irregularities (Harshad Mehta scam)	Apr 1992	4,131
Chidambaram's 'Dream Budget'	Feb. 1997	3,453
BJP Coming to power	Mar. 1997	3,817
Pokhran Nuclear Tests	May 1998	3,912
Crash in global markets – DJIA lost 513 points on 31/08/98	Aug. 1998	2,988
UTI Fiasco & Removal of Badla system	July 2001	3,347
Ketan Parikh Scam	March 2001	3,808
Terrorist Attacks in USA	Sept. 2001	2,918
Attack on Indian Parliament	Dec. 2001	3,315
Indo-Pak war like situation	June 2002	3,257
Drought fears	July. 2002	3,215

(The author is a Senior Economist in the Department of Economics and Statistics, Tata Services Ltd. and the views expressed above are his own)



# *The Art of Banking*



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## Marketing India as an Investment Destination

- Mr. S. Nagnath



In the global marketplace, competition for capital is very intense. Countries and companies jostle to vie for attention as they market their policies and prospects, respectively, to an audience of global investors. This is not very different from the manner in which a consumer product is

marketed to prospective consumers.

Why should a country market its investment potential to foreign investors? Quite simply, to raise its profile in the international marketplace. An infusion of foreign investment, whether direct or portfolio related, serves to raise the overall level of growth in the economy by increasing employment, introducing competition, lowering prices, benefiting consumers and helping expand aggregate demand. This proposition is as much valid for Mumbai, which is aspiring to become a world-class metro city with high quality infrastructure, as for India.

A decade ago, when India opened up its stock market to foreign portfolio investment (by FII), one of the recurring themes that caught the attention of foreign investors was the huge middle class consumer market, which was then estimated to be of 250 mn people. This was similar to the perspective held then on the potential of the Chinese domestic market. However, while investments have continued to pour into China, there has only been a steady trickle as far as India is concerned. Foreign direct investment (FDI) flows into China have been in excess of \$35 bn. each year for the better part of the last decade. For India, that number has averaged around a tenth of that flowing into China. Foreign portfolio investments into India have been robust, no doubt, but even here, China has largely caught up in the last 3-4 years.

So, where have we missed a turn in the road? Here are a few suggestions that I feel will help us gain a better profile amongst international investors.

- Always put your best foot forward. Notwithstanding all the issues and problems confronting us, always aim to put a positive spin on events. Follow the Chinese example, in this regard. Self-criticism, extended beyond a point, may prove counterproductive. A positive take on events, on the other hand, may help generate infectious enthusiasm.
- In today's globalized economy, good economics makes for good politics. Attractive policies will always attract investment. If we succeed in attracting one global major, the task becomes easier in attracting the next five majors. Allow the demonstrative effect to play out. Work hard to get your primary anchor investor in.
- Improve physical infrastructure on an urgent basis. FDI is very sensitive to the efficacy of physical infrastructure. It is not enough to present cheap labour and tax incentives as the major plank for attracting direct investment, if these are offset by poor infrastructure i.e. poor roads, congested ports, erratic water and power supply, etc.
- To showcase a country on the move, urban infrastructure will also require massive upgrading. Mumbai, once again is in dire need of such efforts. This is especially so if we want to become a globally preferred hub for outsourcing services (as opposed to China which is seeking to become the cheapest manufacturer in the world for goods). However eloquently one might argue the case for skilled manpower in India, English speaking skills, etc., these are in a sense still intangibles. Tangible symbols are required to communicate progress and achievement. Good roads, great highways, gleaming airports, grand skyscrapers -all of these contribute immeasurably to enhancing the sense of reassurance in the mind of the investor that he has made the appropriate choice and that he will savour the satisfaction of being a partner in progress of a country or city on the move. When an investor arrives in a country, he immediately tends to benchmark his expectations, rightly or wrongly, with the reality surrounding him. Just as packaging and presentation are crucial for commanding a premium in the consumer goods market, so it is with marketing the investment potential of a country as well.
- Let's not fight shy of blowing our trumpet. After all, how many democracies can you find that are as large, vibrant and diverse as ours? We cannot be shy about communicating our achievements and being defensive when someone criticizes us. That way, one attracts the limelight for none of the right reasons. We have a lot of positive



momentum going on in the reforms front and this should be sufficiently highlighted. So while the occasional scandal in the financial markets may grab attention, dematerialization, for example is a powerful positive in a market that had for decades relied on physical settlement.

- Indian companies should tap overseas markets more aggressively i.e. large issue sizes to fund giant projects. For one, such deals attract the attention of the big investment houses globally, which in turn, will pull out all the stops to market the issue successfully. In the process, the country and the company is marketed across a wide range of investors and across different geographies globally than would have been previously envisaged. Large IPO's overseas also channelize the attention of investors to the prospects of the country and the issue on offer. One success leads to another until the country becomes a hot investment destination. China for example, raised over \$20 bn. in 1999-2000 with many

deals exceeding \$3 bn. each. As a result, more analysts at various investment houses began following Chinese stocks actively and thus heightened the level of investor interest.

- Finally, we should initiate steps that lead to a greater investment interest in the country by the Indian diaspora abroad. Again, this trend has contributed quite positively to boosting the level of foreign direct investment in China. With the emphasis now more focused on the services sector, there is an opportunity, like never before, to attract investments, both in the form of capital and know-how, from the Indian diaspora.

To sum up, we hold a lot of promise as an investment destination and should not fight shy of flaunting our credentials proudly and prominently for the benefit of India as well as Mumbai.

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*(The author is the Joint President of DSP Merrill Lynch Investment Managers Ltd.)*



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# Understanding Government Securities Market

- Mr. Kiran Umrootkar



Mumbai is the financial capital of India; it accounts for almost 90% of the financial transactions of our country. Mumbai has provided the foundation for industrialization by offering one of the first stock exchanges in our country. The other segments of financial markets, namely, the debt and

forex markets predominately exist only in Mumbai. Such broad-based financial infrastructure has contributed greatly to the economic development and industrialization of India, as sound financial markets are critical for the progress of any economy.

Most ordinary investors are familiar with equity markets. Recently, we have increasingly been hearing about Government Securities market, which comprises almost 95% of the debt market, and the need for retail participation in this market. But an individual investor is often confused with various terms used. Therefore, an attempt is made here to clarify some of the issues from the viewpoint of an ordinary investor.

## What is a Government Security?

Government Security is a sovereign debt issued by the Reserve Bank of India (RBI) on behalf of the Government of India. These securities are issued to cover the Central Government's annual market borrowing programme to fund the fiscal deficit.

The term "Government Security" includes:

- Central Government Dated Securities
- State Government Securities
- Treasury Bills (TBs)

The market borrowings of the Central Government are raised through the issue of dated securities and 364 days TBs either by auction or by floatation of fixed coupon loans. In addition, TBs of 91 days are issued for managing the temporary cash mismatches of the Government. These do not form part of the borrowing programme of the Central Government.

## Types of Government Securities

Government Securities are of the following types:

### Central Government Securities

- (a) **Dated Securities** are generally of fixed maturity and fixed coupon securities usually carrying

semi-annual coupon. These are called dated securities, being identified by their date of maturity and the coupon. For example, 11.10% GOI 2003 is a Central Government security maturing in 2003, which carries a coupon of 11.10% payable half yearly. The key features of these securities are:

- They are issued at face value.
- Coupon or interest rate is fixed at the time of issuance and remains constant till redemption of the security.
- The tenor of the security is also fixed.
- Interest /Coupon payment is made on a half yearly basis on its face value.
- The security is redeemed at par on its maturity date.

- (b) **Zero Coupon Bonds** are bonds issued at discount to face value and redeemed at par. The key features of these bonds are:

- They are issued at a discount to the face value.
- The tenor of the security is fixed.
- The securities do not carry any coupon or interest rate. The difference between the issue price and face value is the return on this security.
- The security is redeemed at par on its maturity date.

- (c) **Floating Rate Bonds** are bonds with variable interest rate with a fixed percentage over a benchmark rate. There may be a cap and a floor rate attached, thereby fixing a maximum and minimum interest rate payable on it. The key features of these securities are:

- They are issued at face value.
- Coupon or interest rate is fixed as a percentage over a predefined benchmark rate at the time of issuance. The benchmark rate may be TB rate, Bank rate, etc.
- Though the benchmark does not change, the rate of interest may vary according to the change in the benchmark rate till redemption of the security. The tenor of the security is also fixed.
- Interest /Coupon payment is made on a half yearly basis on its face value.



- The security is redeemed at par on its maturity date.
- (d) **Treasury Bills:** There are different types of TBs based on the maturity period and utility of the issuance like, *ad-hoc* TBs, 3 months, 12 months TBs, etc. At present, the 91-days and 364-days TBs are in vogue.
- Last, all entities registered in India like Banks, Financial Institutions, Primary Dealers, Companies, Corporate Bodies, Partnership Firms, Institutions, Mutual Funds, Foreign Institutional Investors, State Governments, Provident Funds, Trusts, Nepal Rashtra Bank and even individuals are eligible to purchase Government Securities.

### State Government Securities

State Government Securities are securities/loans issued by the RBI on behalf of various State Governments for financing their developmental needs. The RBI auctions these securities from time to time. These auctions are of fixed coupon, with pre-announced notified amounts for different States.

### Some Key Features

There are some notable features of transactions in G-Securities.

- First, the coupon rate and year of maturity identifies the government security. Example: 12.25% GOI 2008; it indicates (a) 12.25% is the coupon rate; (b) GOI denotes Government of India, which is the borrower; and (c) 2008 is the year of maturity.
- Second, for Central Government securities and State Government securities the day count is taken as 360 days for a year and 30 days for every completed month. However, for TBs it is 365 days for a year.
- Third, the Yield to maturity (YTM) is the discount rate that equates present value of all the future cash inflows to the cost price of the security and is also called the Internal Rate of Return (IRR). The concept of YTM assumes that the future cash flows are reinvested at the same rate at which the original investment was made. The price of a security/bond is inversely related to its yield. As the yield increases, the price decreases and if the yield falls there is an increase in the price.

### Why should individuals invest in G-Secs.?

- No TDS
- Interest income upto Rs.12,000 is exempt under section 80L of the Income Tax Act. The additional benefit of Rs.3,000 is also available for interest earned on Government securities
- Zero default risk, being a sovereign paper
- Regular income in the form of half yearly interest payments
- Highly liquid due to active secondary market
- Simplified and transparent transactions
- Hassle free settlement through Demat / SGL accounts
- Easy loans available from Banks
- Holding possible in dematerialized form

### How to invest in G-Secs.?

Investment in Government Securities can either be made in the primary market by participating in the RBI auctions or by purchasing from the secondary market. RBI has recently introduced the scheme of Non-Competitive Bidding for the benefit of retail investors. Under this scheme non-institutional participants will be allotted securities at the weighted average cutoff rate. Up to 5% of the issue size is reserved for investors under this scheme. Investors can invest in a hassle free manner by opening a Demat account. Investors can contact any Primary Dealer to make an investment in Government Securities.

(The author is Executive Director, Tata TD Waterhouse Securities Ltd.)






### Towards Investor-friendly Government Securities Act

The law relating to Government Securities and their management by the Reserve Bank is laid down in the Public Debt Act, 1944. The Act is applicable to all market loans of the Central and State Governments. Over the years, provisions of the Act and the Rules framed thereunder have been found to be inconsistent with the developments that have taken place in the financial markets. On the other hand, the rise in volume of the public debt and the consequent growth in the government securities market warrant an investor friendly legal framework. Accordingly, the Union Cabinet has approved the proposal to replace the existing Public Debt Act, 1944 by the Government Securities Act. The new Government Securities Act will simplify the procedures for transactions in Government securities, allow lien marking/pledging of securities as also electronic transfer in a dematerialised form. The State Governments except the state of Jammu and Kashmir have passed the resolution under article 252 of the Constitution of India empowering the Parliament to enact the Government Securities Bill.

Source : RBI Annual Report, 2001-2002



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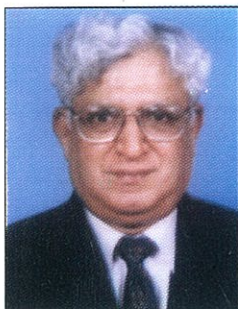
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# Dedicated Urban Transport Fund for Mumbai

- Mr. Arun Mokashi

*This paper presents a proposal to initiate dedicated funding for transport projects. It aims at generating financial resources from all stakeholders and suggests the need for managing these resources by an autonomous Urban Transport Fund to be used exclusively for upgrading Mumbai's transport infrastructure.*



## Introduction

The rising mismatch between requirements of resources for urban transport and the actual allocation of funds for this purpose has resulted in the progressive deterioration of transport systems in India. The need for arresting this decline has been felt for quite

sometime. This is possible, if additional resources, outside Government funding are sought. This may sound difficult, but some of the recent initiatives like the creation of Central Road Fund, (which annually generates over Rs. 5,000 crores), are good directives. This proposition needs a review of critical issues and more importantly, a consensus on proposed plan. Some attempts to create dedicated urban transport fund were made in the past. These attempts were valuable in sharpening the concept of an autonomous fund dedicated to financing urban transport projects. In several respects, Mumbai is an ideal city for taking such initiatives forward and implementing it in the near future.

## Need for Dedicated Funding

The metropolitan cities in India face multiplicity of organisations responsible for transport. All of them however, are partially responsible for managing transport infrastructure in the city. For example, municipal corporations are responsible for civic services; transport organisations for passenger transportation and police for overall law and order situation. None of these organisations is answerable for adequacy of transport infrastructure and its upkeep in terms of repairs and maintenance. This is mainly because the resource requirement of the transport infrastructure is very large and no single authority is able to provide it regularly and promptly. This situation is not likely to change in the near future.

Mumbai has been experiencing paucity of funds for transport schemes for over four decades. In the past, a number of schemes were stalled or partially executed for paucity of funds. For example,

- Wilbur Smith Plan (1963)
- Traffic System Management Plan (1980)

- Comprehensive Road Development Plan (1983)
- High level Committee Proposals (1987)
- Mumbai Metro (1997)

These events clearly indicate that low cost measures alone will not be adequate for Mumbai's traffic. Indeed, the fund requirements will rise sharply as traffic increases and the city fails to implement large transport projects. This will reflect poorly on mobility of the city and may even result in Mumbai losing its status as the "Commercial Capital of India". This will prove harmful both to the business community and residents of the city.

## Proposed Dedicated Urban Transport Fund

The prospects of the city's decline have forced transport planners and financial specialists to propose a dedicated fund for upgrading Mumbai's transport system. Contributions to this fund would come from transport users, property owners, employers, automobile manufacturers, and those involved in commercial activity. The key principles/guidelines for the management of an Urban Transport Fund (UTF) for Mumbai are enunciated below:

The fund will be exclusively used for upgrading urban transport in Mumbai. This requirement is very large. For example, ten key representative projects are estimated to cost over Rs. 2,000 crores. These are: Mumbai Trans Harbour Link (Sewri to Nhava Sheva), Mumbai Underground Metro, Bandra-Kurla Rail Link, Shivaji Terminus to Churchgate Underground Rail Link, Light Rail Transit, Skybus, Worli to Nariman Point Sea Link, Western Relief Road, Anik Panjarpole Link and Water Passenger Terminals. In addition, the expenditure for repairs and maintenance of city roads and bridges, and augmentation of bus fleet is estimated at over Rs. 120 crores per year. Thus it is evident that the finances required for a number of projects and their subsequent maintenance are large and expected to rise in future.

## UTF-A Part of Long Term Strategy

The UTF should be part of a long-term strategy to provide continuous finances for upcoming transport



projects, and not simply means of avoiding formal budget discipline. The UTF should depend entirely on user charges. Tax revenues and user charges should be accounted separately. Users are willing to pay more for better urban transport services. A number of market surveys have brought out this fact. Additional revenue should come from extra payments from transport users, resulting from improvement in standards and quality of urban transport. The following user charges can be the main sources of funds for the UTF:

- Road Cess on Fuel
- Vehicle License Fees
- Toll Charges

Other possible sources of funds are (i) enhanced property tax in Mumbai, (ii) property transaction surcharge, (iii) surcharge on sales tax on tyres, tubes and motor parts in Mumbai, (iv) levy of 1 to 2 percent of wage bill of industrial and commercial establishments employing more than 50 persons in Mumbai, (v) levy on properties falling under or on a corridor extending one kilometre on either side of proposed busways, Light Rail Transit (LRT) or a sky-bus or Metros, (vi) increase in registration charges and road tax on vehicles (except buses and Intermediate Public Transport (IPT) like auto-rickshaws) and (vii) surcharge on passenger fare. These possible sources require further deliberation.

### Primarily an Autonomous Body

Past experience suggests that an independent board should manage the UTF. It should have adequate representation from transport users as well as the business community. The board should not have any vested interests. Chairman of the board should be an eminent person, who is impartial and is able to speak in the interest of the nation, state and city.

UTF funds should be prudently used, to give users value for their money. Transport users will appreciate the benefits of paying additional charges when the improved quality of city transport results in savings. In such a scenario, upgrading public transport will be the first priority for UTF managers. This will also enable the fund to offer these benefits to a wide spread transport user community. The fund can then propose an increase in charges. The objective should be to reach a position where UTF accruals are adequate to meet expenses and requirements of specific transport improvements. The transport system in Mumbai can gradually move towards financial independence.

Fuel levies, in the form of transport user charges, dedicated to the UTF should be de-politicized and justified separately for residents of Mumbai. Such charges should be backed by proper legislation. UTF managers should spend time on reaching out to the

public, explaining and justifying the increase in charges. This exercise should involve transport users and market researchers.

### Key Stakeholders

All ministries and agencies involved in the transport sector should be represented in managing the fund. These should include

- Union Ministries of Finance, Roads, Waterways and Shipping
- State Government Departments (Finance, Revenue, Home, Urban Development, Transport, Public Works Department and others)
- Local Government (MCGM, BEST, etc.).
- Representatives of private sector, civil society and transport users including (Chambers of Commerce, Bombay First, Automobile Associations, Truckers' Associations, NGOs, etc.)

Selecting appropriate number of members on the Board, who directly represent the transport industry and business community, is vital. Support from these groups is essential while imposing or increasing user charges. Representation from contracting and consulting organizations may also be considered in view of their clients' relations with traffic and transport organizations.

### Way Forward

It is imperative to organize a workshop in Mumbai, to secure consensus on setting up the UTF. It should focus on the Implementation Plan for the UTF. Stakeholders would jointly decide scope, structure and jurisdiction for the implementation plan. The workshop may also indicate some unexplored avenues that provide additional resources for Mumbai's transport sector.

This exercise will finalize the mandate for the UTF. Its implementation should be closely monitored by a Steering Group, comprising of senior officials from the Government and representatives of user organizations. An eminent person, having considerable administrative capability and leadership quality may head this group. Major responsibilities of the 'Implementation Steering Group' would be:

- Preventing and reducing administrative delays,
- Expediting enacting of required legislation,
- Arranging continuous dialogue amongst stakeholders, and
- Providing interventions at top levels.

In short, the creation of an UTF in Mumbai is an idea whose time for implementation has now come!

*(The author is Consulting Adviser, Tata Consultancy Services and Former Transport Specialist, World Bank)*



# Evolution and Progress of Mumbai

## - Contribution by Public Sector Banks

- Mr. M. R. Ramesh



Mumbai is located in Maharashtra, which tops among states contributing to 15% of the national income. It is named as the service centre for the country, as the contribution of services sector to the GDP of the state has gone up to 48% in 1998-99 from 29.8% in 1960-61.

Besides financial sector services like ports, telecom, airports, etc., services have also contributed in substantial measure to this growth. This sector accounts for 34.6% of the total investments (Rs.53,425 crores as at July 2000) in the state, and the income generated by this sector has increased by more than manifold times in the last two decades.

Mumbai is undoubtedly the leading banking and financial services centre and is rightly called the financial capital of India. It has a vast reservoir of human resources with the right skill (literacy rate at 82.5% is the highest for both males and females) and the required framework for integrated delivery of financial services. The contribution of Public Sector Banks (PSBs) and FIs in building up Mumbai in this regard is certainly noteworthy. As at March 2002, Greater Mumbai had 1,460 bank offices with Rs.181,158 crores of deposits and Rs.141,837 crores of advances. Of this, PSBs have 1,171 offices with Rs.83,181 crores in deposits and of Rs.94,395 crores of advances. The credit-deposit ratio works out to be more than 100%. The high incidence of credit-deposit ratio is an indication of substantially large quantum of funds, directed to credit deployment by banks.

The progress of banking in India since Independence can broadly be traced under three different phases: Pre-nationalization before 1969; post-nationalization after 1969 and post liberalization after 1991. In the pre-1969 scenario, banking was dominated by the state owned SBI on one hand and a good number of private sector banks on the other. Then came the establishment of Development Financial Institutions for facilitating investment in industries. In 1969, all major banks were brought under state control and subsequent developments were essentially state directed. This period saw the emergence of capital market institutions as well as the mutual fund

industry that gave a substantial boost to the growth of capital markets in the country. With the country embarking on financial sector reforms in 1991, private sector initiatives received a fillip and there have been phenomenal changes in the financial sector with technology playing a leading role. In all these phases, Mumbai assumed a pivotal role.

The contribution of the banks in the evolution and progress of the city can broadly be viewed under three heads:

- First, spread of banking habit, mobilization of resources and extension of credit for development of commerce and industry
- Second, the creation of specialized type of institutions with focus on developmental activities
- Third, the development of financial infrastructure for the growth of the market with stability and robustness.

Since nationalization, the most vital aspect of public sector banks' contribution is in the spread of bank branches. As of date, more than 80% of the branches in Mumbai are operated by PSBs and naturally occupy a dominant position in the collection of deposits and extension of credit. Since headquarters of major commercial and industrial establishments are in Mumbai, their fund requirements have invariably been of larger magnitude; only the major public sector institutions have been capable of satisfying the same.

In the last two or three decades, banks have also focused their attention to develop particular segments of the economy through opening dedicated outfits. Illustratively,

**Overseas/International banking branches** to cater to customers who are overwhelmingly involved in international business. Incidentally, in the building up of foreign exchange business, Mumbai has the time zone advantage being in the midpoint between important financial centres in the globe.

**Small Scale Industries Branches** to serve small and medium enterprises. The number of small units in Mumbai (by 2000) is 17,156 with an employment of 150,779 and investment of over Rs.716 crores.

**Commercial/Industrial Finance branches** to help large industrial/commercial establishments.



**Personal Banking Branches** essentially to take care of investment needs of high networth individuals.

All these initiatives were mostly by the PSBs thanks to their vast infrastructural resources, especially qualified personnel at their command. However, the most notable contribution of these banks has been the initiative taken by them in creating special institutions and various other efforts for establishment of an efficient market infrastructure, including Merchant Banking and Mutual Funds for the development of capital markets. SBI played a pioneering role in promoting SBI Capital Markets and SBI Mutual Funds. It is a matter of record that more than 90% of merchant banking and 80% of mutual fund business is concentrated in Mumbai.

The formation of institutions like Discount and Finance House of India Ltd. (DFHI) and Securities Trading Corporation of India Ltd. (STCI) at the behest of RBI, other PSBs and financial institutions has been a major step in the development of money and Government securities markets. Almost the entire money and Government securities market transactions averaging Rs.25,000-30,000 crores per day take place in Mumbai alone. Again when the institutions of Primary Dealers for market making in Government securities was conceived by RBI, it was the public sector institutions which took the lead in floating the first few institutions. Exim Bank, another endeavour of major public sector institutions has been playing a dominant role in the promotion and growth of international banking business by giving specialized type of assistance to units engaged in foreign trade.

The formation of the National Stock Exchange (NSE) in Mumbai is another major development. It brought about metamorphic changes in stock market dealings with the required transparency and comfort to investors in the form of guaranteed settlement. With state-of-the-art technology and systems comparable with international standards, it has brought about

qualitative changes in stock dealing and burgeoning volume in trades. More than 90% of stock exchange activities take place in NSE and BSE with leading contribution from NSE.

Creation of rating agencies is yet another market infrastructure development where public sector financial institutions have played a leading role.

An institution of very recent origin is the Clearing Corporation of India Ltd., which has been set up with SBI taking the lead role. It is an institution for settlement of trades in government securities and forex transactions. It would give the much needed comfort to the market by providing guaranteed settlement to the participants. Similar efforts by banks in Mumbai are seen in the creation of other specialized institutions like Credit Information Bureau (India) Ltd. (CIBIL), an institutional mechanism for sharing information on borrowers and the Proposed Asset Reconstruction Company for tackling NPA portfolios of banks and FIs.

It could be seen that all the above initiatives have led to; (a) substantial contribution to the GDP growth of the state; (b) perceptible increase in employment generation; (c) a good growth in exports revenue and (d) catalytic action in the advancement of technology and infrastructural development.

In addition to the above, it is also gratifying to note the contribution made by PSBs in various developmental programmes undertaken by the Government for the underprivileged communities under the auspices of lead bank schemes. Since, Greater Mumbai falls under metropolitan centre, the impact of such initiatives may not be significant.

In summing up, viewed in the context of the financial sector reforms on the anvil, Mumbai is certain to emerge as a major international financial centre with PSBs and financial institutions becoming technology savvy, playing a more active role in the future.

*(The author is the Managing Director, Clearing Corporation of India Limited)*

Key BSE & NSE Statistics								
	Listed Companies		Market Capitalization		Avg.daily Turnover		Total Turnover	
	Nos.		Rs. crores		Rs. crores		Rs. crores	
	NSE	BSE	NSE	BSE	NSE	BSE	NSE	BSE
March'96	422	5,603	401,458	526,476	667	223	12,672	4,012
March'97	550	5,382	419,367	463,915	1,581	821	30,035	16,422
March'98	612	5,853	481,503	560,325	1,460	1,110	30,669	23,310
March'99	645	5,848	491,175	545,361	2,605	2,071	57,337	39,344
March'00	673	5,889	1,020,426	912,842	5,028	4,051	105,584	85,063
March'01	785	5,955	657,847	625,553	2,868	2,151	60,226	45,170
March'02	793	5,782	636,861	612,224	2,330	1,354	44,263	25,719

Source: Centre for Monitoring Indian Economy, July 2002



# Relevance of Micro-finance in Socio-Economic Resurgence in Mumbai

- Dr. C.L. Dadhich



## Poverty Syndrome

According to the census of 2001, of the total population of 15.1 mn. in Mumbai, as many as 5.82 mn. or forming about 38.5% live in slums. It is not unrealistic to assume that a great majority of slum/pavement dwellers are poor and are mostly engaged in

activities that do not generate adequate income. As scope for generation of wage employment is somewhat limited, reliance is placed generally on self-employment activities like vending; pickle and jam making; papad making; cooking and supplying of meals; carpentry, tailoring, driving and plumbing; mechanical and electrical fittings; and provision of other services such as laundry, saloon, courier, etc.

## Sponsored Poverty Alleviation Programmes

So far, a number of programmes have been launched to ameliorate urban poverty, which includes the Scheme of Urban Micro Enterprises, Nehru Rozgar Yojana and Prime Minister's Integrated Urban Poverty Alleviation Programme and Urban Basic Services for Poor (UBSP), etc. Within the framework of such multiplicity of schemes, more emphasis was given to individual programme targets and as a result, income generation on a sustainable basis was relegated to the place of secondary importance. With a view to rectifying this situation, Government of India has most of these schemes restructured into Swarna Jayanti Shahari Rozgar Yojna (SJSRY) from December 1997 onwards.

This programme provides employment to the unemployed or underemployed urban poor by encouraging them to set up self-employed ventures. The scheme also gives special impetus to the empowerment and upliftment of the poor women. For this purpose, a special programme for development of women and children in urban areas, has been launched under which, groups of urban poor women setting up self-employment are eligible for subsidy up to 50% of the project cost. It must, however, be stressed that all such sponsored poverty alleviation programmes do not generally lead to

establishment of relationship banking. Indeed, most of these often remain a one-time activity, wherein loan is given usually at one stroke. In this situation, the borrower tries to get maximum limit of the loan amount permissible under a particular scheme to fetch the maximum amount of loan and subsidy.

Further, it is observed that financing of a large number of small sized loans under poverty alleviation programmes often exacerbates transaction costs. For the banks, subsidized interest rates make lending under sponsored programmes least attractive. The provision of capital subsidy at times vitiates the effectiveness of poverty alleviation programmes to a significant extent. Further, in the absence of social intervention, benefits of financial intervention often get marginalized. For example, if there is an uncontrolled increase in family size, despite the accrual of projected incremental income, there would be an erosion in the per capita income. Likewise, various social evils like addiction to drinking, smoking, gambling, use of drugs as also other tobacco products may push the poor family towards an enduring poverty. Thanks to these limitations, the sponsored poverty alleviation programmes have not made significant positive impact.

## Micro-finance - An Innovation for Poverty Alleviation

Surely, the poor (whether in rural or urban areas) cannot and should not wait for long to get the required assistance. To address all these complex issues, a proper blending of financial and social intervention is imperative. In this context, the importance of micro finance intervention cannot be over emphasized. Micro finance is an innovative tool. It is concerned with the provision of thrift credit, other financial services and products of very small amounts with an element of social intervention enabling mainly the poor to improve their living standards. The concepts 'micro finance' and 'micro credit' are usually used interchangeably; in fact, micro lending *per se* is at times considered as micro credit in some quarters. However, micro credit is always dovetailed with thrift, and hence, micro finance is a more appropriate expression rather than micro credit.



Micro finance includes a whole gamut of financial services like thrift, credit, insurance, leasing of equipment, remittance, etc. required by the poor. Micro finance is generally routed through small groups commonly known as Self-Help Groups (SHGs), which not only serve as a platform to supervise the activities of each other but also provide social collaterals. Loan amount to the member of the SHG is based on the amount of the savings of the SHG and is recovered generally in 12 monthly installments. Loans are repeated and gradually increased; thus establishing relationship banking.

The implicit objective of SHGs is to combat unjust social relationship by increasing people's participation through their empowerment. The emphasis is also on human resource development. The SHGs are generally of small size. Such small sized SHGs not only ensure active participation, but also promote group dynamics in decision-making and greater transparency. Moreover, separate SHGs for men and women are more conducive for addressing the issues of gender imbalance. Also SHGs frame their own rules and regulations to suit local conditions. Though the primary objective of micro-finance interventions is to help the poor to surmount poverty, they also assist them to undertake financially viable enterprises, which could be taken up by the banks for commercial lending.

#### **Relevance of Micro-finance in Mumbai**

Although, micro finance interventions are more popular in rural areas (illustratively, Grameen Bank in Bangladesh; Aman, Ikhtiyar in Malaysia; and MYRADA in India), their relevance in urban and metropolitan areas is more pronounced as these areas actually bear the brunt of the consistently increasing migration of the poor from rural areas. In India, Mumbai has the largest number of slum dwellers (5.82 mn.) distantly followed by Delhi (1.82 mn.), Kolkata (1.49 mn.) and Chennai (1.08 mn.). In terms of proportion of slum dwellers to total population, Mumbai again ranked first with 38.5% slum dwellers distantly followed by Delhi (18.8%), Chennai (18.3%) and Kolkata (12.7%).

The concentration of a large number of the poor is not only an incipient threat to the peace and harmony of the city, but also hazardous for the financial health of the city. Against this backdrop, there is an urgent need for a mechanism under which those who migrate to cities have necessary organizational network to fall back upon in times of difficulties. Nonetheless, efforts are in place to help the poor in a number of

cities such as "SEWA" in Gujarat (SEWA also operates in several other areas in Gujarat) and Society for Promotion of Area Resources Centres (SPARC) operating in major cities of India, including Mumbai. Besides SPARC, National Slum Dwellers Federation (NSDF) and Mahila Milan Bank together form an alliance to help the poor in Mumbai as also in other cities to organize poor in SHGs and work on the principles of micro finance. There are also quite a few other non-governmental organizations (NGOs) operating in Mumbai for the betterment of the poor, but all these initiatives need to be augmented further, given a staggering number of Mumbai's poor.

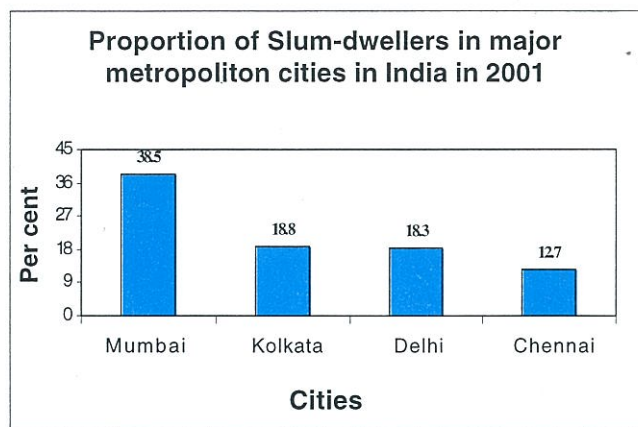
Undoubtedly, various concerned agencies will have to make concerted efforts to cover and assist all the poor within a timeframe. In this context, all those who are interested in equity and social justice, as well as in the betterment of Mumbai, should join together either as co-operative society, trust, company, non-banking finance company (NBFC), mutually aided co-operative societies (MACS) or any other type of institutions that offer micro finance services to the poor. Thus, it would be possible to organize at least pavement dwellers (if not slum dwellers) in Mumbai to form SHGs of homogenous people in different localities. Undoubtedly, proper shelter is the top most priority for all urban poor. Indeed, a better living place is the very foundation for a socio-economic transformation.

Similarly, a proper work place is a pre-requisite for taking up any gainful economic/business activity. It is important to note that the poor generally do not possess proper ownership rights of housing or business site. They are mostly squatters, living and operating businesses without any legal titles. Therefore, the first priority towards reduction of poverty in a place like Mumbai can be achieved by clearing of pavements or slums by concerned authorities and provision of alternative sites with legal rights. Organizing slum dwellers in SHGs would enable them to sort out problems like purchase of land, construction of dwellings etc., with concerned agencies. The members of the SHGs should be encouraged to save at least a rupee or two rupees per day, and that may be ultimately used for construction of shelter as also to tide over emergencies. This will also relieve them from the clutches of money lending sharks.

It is interesting to note that according to a case study of Mahila Milan Bank, the poor used to borrow in times of desperate need from pathans/money lenders, pawnbrokers at an interest rate of 10% per month.



But on joining savings groups of Mahila Milan Bank, they have been completely relieved from the clutches of such sharks. The peer pressure under SHG System will also curb the tendency of selling of newly acquired house/work site and may discourage reverting back to foot-paths, which is not uncommon



among pavement dwellers. SHGs will also help them in procurement of raw materials and skill development for processing of raw material and marketing of finished goods processed by the poor.

#### Support from SIDBI

SIDBI has galvanized its efforts for accelerating orderly growth of micro sector in urban and metropolitan areas. It has established the Foundation for Micro Credit in November 1998 to provide a complete range of financial and non-financial services to institutions engaged in delivery of micro finance products and services. SIDBI's Foundation also provides support to Micro finance Institutions (MFIs) for capacity building.

Under its scheme, micro finance institutions having good credibility, track record and professional expertise are eligible for assistance. The loan assistance for micro finance institutions for onlending is need-based, and is subject to a minimum limit of Rs.12 lakh. However, maximum amount of assistance by micro finance institutions to a single borrower/member of a SHG should not exceed Rs.25,000.

#### Policy Initiatives of RBI

While announcing the monetary and credit policy for the year 1999-2000, the RBI Governor, Dr. Bimal Jalan, evinced a great deal of interest in bridging gaps between micro realities and macro policies. Accordingly, the Micro Credit Special Cell was set up in the RBI to suggest policy measures for mainstreaming and upscaling of the micro finance sector. Indeed, it is the first central bank in Asia,

which took several policy measures concerning micro finance, the key features of which are:

- (i) RBI has allowed banks to formulate their own models or choose any conduit/intermediary for extending micro credit. Banks are allowed to choose suitable branch/pocket/ area where micro credit programmes can be implemented;
- (ii) Banks are permitted to prescribe their own lending norms keeping in view the ground realities;
- (iii) Banks are also allowed to devise appropriate loan and saving products and related terms and conditions including the size of loan, unit cost, unit size, maturity period, grace period, margins and purpose of borrowing including for housing and shelter needs;
- (iv) Interest rates on bank's loans given to micro-finance institutions are completely deregulated;
- (v) Bank lending under micro finance will be treated as part of priority sector targets as well as under sub-target of lending to the weaker sections;
- (vi) The micro-finance institutions registered as not for profit NBFCs have been exempted from registration and prudential requirements. RBI has permitted such NBFCs to provide credit not exceeding Rs.50,000 for business activity and Rs.1,25,000 for meeting the cost of a dwelling unit to the poor.

This apart, the Government of India has also allowed foreign direct investment in micro credit to encourage foreign participation in various micro finance projects.

#### Conclusion

In summing up, micro finance is an innovative mechanism for ameliorating urban poverty. Indeed, it offers an inspiring tool for concerned people, be it businessmen, industrialists, professionals, administrators, bankers, researchers or students, for making Mumbai a better place to live, work and invest in. All these stakeholders can deploy micro finance institutions to solve the problems of the pavement dwellers, first through the conduit of SHGs by availing of assistance of SIDBI and other facilities and freedom given by RBI towards mainstreaming and upscaling of micro finance sector.

*(The author is Director, Department of Economic Analysis and Policy, Reserve Bank of India)*



## Clean Mumbai Campaign

The Municipal Corporation of Greater Mumbai (MCGM) has launched the 'Clean Mumbai Campaign' on 15<sup>th</sup> August 2002. The cleanliness drive of this kind has become an annual feature for the past few years. This time the campaign for cleanliness will continue till mid-November, 2002.

This campaign aims to convey to people that cleanliness programmes are not just a routine exercise but they should become a part of a continuous process. The Municipal Commissioner, Mr. K. C. Srivastava has emphasized that co-operation from city's youth is an important factor in the success of such endeavours.

Before proceeding further, it may be interesting glance at the **status of solid waste in Mumbai**.

- It is observed that on an average, individuals residing in elite or developed areas generate 450 gms of waste, while those in slums 250 gms. In case of floating population, the generation of waste is 150 gms. Given Mumbai's current population of 12 mn. and floating population of 3mn., the total solid waste generated amounts to almost 7,025 tonnes per day. In addition, waste generated from leaves and litter amounts to 120 truckloads.
- At present, the MCGM has about 6,000 collection points, of which, 560 are chronic points and 250 points are not attended to regularly. In addition, there are 3,811 house to house collection points, which are essentially located in the island city.
- In serviced areas, Municipal sweepers clean up road length of upto 1,500 km and collect about

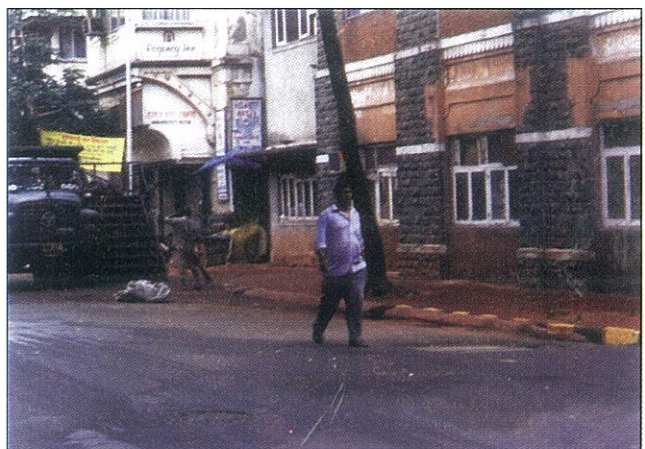
3,500 metric tonnes of garbage, whereas in unserviced areas contractors take charge of the cleaning. They clean upto 423 km of road length and collect 1,000 metric tonnes of garbage.

- In serviced area, fleet belonging to the municipality as well as contractors conduct 506 and 773 trips per day, respectively to lift 3,500 tonnes of garbage from 4,200 collection points; whereas in the unserviced areas, contractors' fleet conduct 250 trips per day to lift 1000 tonnes per day covering 1,865 collection points.
- At present, the system of waste management is facing a number of challenges. For example,
  - only 3 land-fill sites for garbage dumping with their capacity having reached the saturation point;
  - bad roads
  - improper filling of garbage vehicles; and
  - the reduced capacity of the compactors by as much as 30% due to theft or damage of garbage containers.

The cleanliness campaign would cover important festivals like Ganapati, Navratri, Dasara and Diwali. Some of the **salient features of this campaign** are:

- 50 prominent locations in the city, like Gateway of India, Hutatma Chowk, CST, Churchgate Station, C. P. Office, Mahatma Phule Market, Marine Drive, etc., have been selected to observe absolute cleanliness.
- The campaign seeks to concentrate on intensive cleaning of the city, ensuring garbage clearance within 24 hours and prompt at chronic points;

View of a Garbage Collection Point Before and After Clean-up Drive





deployment of about 50 nuisance detection squads per ward to monitor the programme, supported by volunteers and two mobile vans. Moreover, penal action will be levied on defaulters through Inspectors of Shops and Establishments, License, Market Department, etc.

- The Collection Points will be allotted numbers for identification of the ward, section and garbage bin. Information about clearance timings and telephone numbers of the solid waste management department for garbage complaints will also be provided alongside.
- The Municipal Commissioner has emphasized on 'reduce-recycle-reuse' principle of waste management. The amount of garbage handling would be reduced by educating people in segregation of wet and dry garbage, thereby reducing the cost of transportation. Some efforts are also being made to extend the life of landfill sites.

- NGOs like AGNI, Clean Mumbai Foundation, Dignity Foundation and a number of citizens' groups are participating in this campaign. A number of corporate houses are also participating by sponsoring communication and cleaning material and adopting some areas/slums. Maharashtra Chamber of Housing Industry (MCHI) is also providing about 55 trucks to help the civic administration clear and transport the garbage.
- According to MCGM at present the city has about 1,959 slum pockets having a population of 72 lakhs. Of these, 575 pockets covering a population of 25 lakhs have been included in the campaign. There are about 170 Community Based Organizations (CBOs) facilitating the operations under the cleanliness drive.

*(Compiled by Dattatraya Sabale)*

## Road Concretization in Mumbai

It is the best of times and the worst of times for Mumbaikars. While the arrival of monsoon brings cheers, it also brings tough times for the city's inhabitants. The rain spells inevitably damage the roads, and the extent of damage depends upon the quality of pavement material. The bitumen or asphalt based pavements, due to their loose structure, are more prone to damages from rains. Pot holes and stagnant water are a common sight during monsoons. Road commuters, vehicle users and pedestrians are all put to great hardships. Understandably, for MCGM this is the testing time.

Recognizing the need for improving road conditions, MCGM has plans on concretization of roads in the city, in about 14 critical stretches. The road concretization yields two benefits: First, it will avoid the ruining of bitumen pavement by the inclement rains, thus, preventing the formation of potholes; Second, it will result in roads of far better quality and durability, albeit with more money. The average expected life span of concretized roads is 15 years as against 5 years for the bitumen road. But, the cost of concretized road is three times as high as that of the latter. However, concretization of roads will lead to savings on road maintenance of upto 50%. MCGM spends about Rs 9 crores every year on road repairs during monsoons.

For road concretization, 14 junctions which require urgent attention were chosen. Interestingly, most of

them are located in the suburbs of Mumbai. The cost of the first phase is expected to be about Rs 70 crores, of which Rs. 10 crores have already been approved. In the execution of this work, the Ready Mixed Concrete (RMC) will be used instead of the old 'in situ' concrete. In this method, the concrete mix is prepared offsite and transported for direct use at the site. This avoids the loading and unloading operations of input material, which, in turn, will prevent traffic disturbance and noise.

Junction location	Road length to be concretized (in metres)
Sane Guruji Marg	700
Dharavi 90 ft. road and 60 ft. road	1200 and 300
Chakala Junction, Sahar Road	300
S.V. Road and J.P. Road junction, Andheri	200
Linking Road, Andheri	1000
Sakinaka Junction, L.B.S. Road	150
Kamani Junction, Kurla	200
Chembur Naka, Chembur	250
Jamamal Chowk, Chembur	100
R.C. Marg, Chembur	450
Umrashi Babba Chowk, Chembur	100
Shivaji Nagar junction, Govandi	150
Bhaiganwadi Junction	200
Near Ghatkopar Police Station	400

*(Compiled by Mr. Ramakrishna Nallathiga)*



# Status of Water Resources in Mumbai:

## A Need for Re-appraisal !

In the crucial month of July this year, there was virtual failure of rainfall in Mumbai as in most other parts of the country. Since then, there has been a welcome respite with the revival of monsoon in August. Nevertheless, it is an appropriate time to reflect on the concerns of the availability and management of water.

### Water Supply

The total available water resources are estimated at 7,869 million cubic metres (MCM)/year and 10,439 MCM/year at 95% and 75% dependability. Of this, water harnessed so far amounts to 2,969 MCM/year. In addition, 292 MCM/year was planned to be utilized.

The MCGM has an installed capacity of 3,193 million litres per day (MLD) of water supply. This comes from the lakes formed in three major catchment areas north of the city. Of this, 100 MLD is delivered to Thane Municipal Corporation, leaving the balance 3,093 MLD for Mumbai. The water drawn from the respective source lakes is shown below:

Catchment Area/ Lake	Daily water supply (MLD)
Vaitarana Catchment Area	
Modak Sagar } Upper Vaitarana	1,160
Tansa	455
Bhatsa Catchment Area	1,450
Other Catchment Areas	
Vihar	110
Tulsi	18
<b>Total</b>	<b>3,193</b>
Source: Municipal Corporation of Greater Mumbai (2002)	

### Water Demand

The demand for water is increasing with the growth of city's population. In 1991, demand for all major uses amounted to 3,930 MLD. The Water Resources Expert Committee (1994), in its report, has

estimated the gross water demand on the basis of population projections, as follows:

Description	2001	2011	2021
Domestic Use	2,841	3,310	3,747
Non-domestic Use	700	700	700
Sub-total	3,541	4,010	4,447
Other uses (@2%)	71	80	89
En-route supply	90	90	90
Leakages*	740	669	555
Losses through plants	178	194	207
<b>Total</b>	<b>4,620</b>	<b>5,043</b>	<b>5,388</b>
(* Leakages targeted to be reduced from 20% in 2001 to 12% by 2021)			

MCGM has apparently made provisions to meet the future water requirements through planned projects. These involve impoundment of reservoirs from the existing rivers and natural lakes. Water management and availability is likely to assume criticality if future demands far exceed the overall supply.

Project	Capacity (in MLD)	Expected year of completion
Middle Vaitarana	477	2003
Kalu	590	2003
Gargai	455	2009
Shai	1,067	2014
Pinjai	865	N. A.
<b>Total</b>	<b>3,454</b>	

### Water Pricing

The present water tariffs are set out below. In addition, consumers are also required to pay water benefit tax at 12.5 %. Also, as 70 to 80 % of water supplied exits as sewage, sewerage charges are collected at the rate of 60 and 39 % of water charges in case of metered and non-metered connections, respectively. For commercial/industrial units, this is 78 per cent.



Connection	Nature of Use	Tariff (Rs per thousand litres)
<b>Metered:</b>	Domestic:	
	- Slums/Chawls	2.25
	- High rise buildings	3.50
	Commercial/Industrial	10.50 – 38
<b>Unmetered:</b>	Domestic	65 % of the ratable value
	Commercial/Industrial	130 % of the ratable value

*Source: Municipal Corporation of Greater Mumbai (2002)*

### Situation Analysis

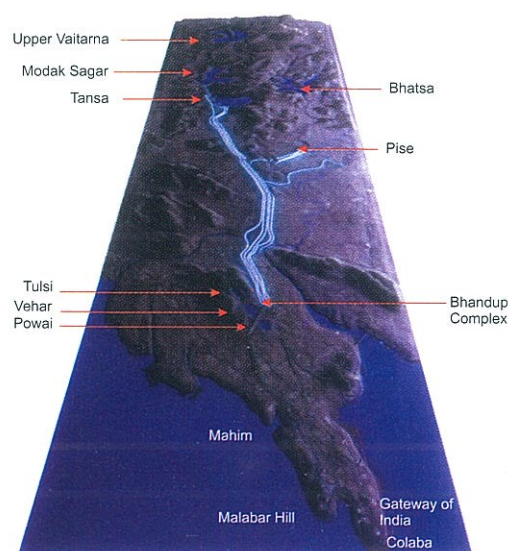
- Out of the gross water supply of 3,193 MLD, after accounting for leakages, the net availability amounts to 2,320 MLD. This includes 600 MLD water supply for non-domestic purposes, namely, industry and commerce. The water losses through leakages in water supply distribution system amount to almost 25%. This is very high, despite MCGM's efforts to reduce the same to 15%.
- The average gross per capita water supply is 260 litres, while the net water available for domestic use is about 155 litres per capita per day (lpcd). This net availability no doubt exceeds norm of 135 lpcd set by the Bureau of Indian

Standards (IS). Apparently, the water supply status appears to be satisfactory on the whole. However, the fact that there are a good number of private water suppliers and a conspicuously large market for water, provides eloquent testimony of the inadequacies of water management in the city.

- Surely, the aggregates should not give any complacency to the municipal authorities. The spatial, temporal and sectoral coverage of water is still missing i.e., some parts of the city do not receive water; some of them receive it intermittently; and some sectors have more privilege in accessing it than others.
- Moreover, the municipal norms of water supply have been fixed at 45 lpcd in slums, 90 lpcd in chawls and 135 lpcd in high rise buildings, respectively. However, the actual water supply widely varies between wards and even localities within a ward. For example, it varies from 50 lpcd in slums to 250 lpcd in high rise buildings.
- As regards pricing, instead of levying a flat tariff for domestic as well as other uses, MCGM needs to identify the threshold point of necessity and levy higher water tariff for every additional unit of water consumed. Similarly, the fact that stiff water tariffs adversely affect the cost-structure of industries, invites careful revaluation.

*(Compiled by Ramakrishna Nallathiga and Dattatraya Sabale)*

### Mumbai and its Water Supply Sources



Source : Water Supply of Brihanmumbai, Brihanmumbai Municipal Corporation



## Metro-Wise Trends in Deposits &amp; Credit of Commercial Banks

(Rs. crores)

	Year ending March				CAGR (%)	
	2002	2001	1996	1991	1991-96	1996-02
<b>DEPOSITS</b>						
Mumbai	141,837	126,139	65,388	28,605	18.0	16.8
Delhi	117,890	103,683	42,569	19,079	17.4	22.6
Kolkata	39,732	35,198	17,659	11,993	8.0	17.6
Chennai	30,188	25,083	12,504	5,932	16.1	19.3
All-India	1,097,049	950,705	426,120	200,568	16.3	20.8
<b>CREDIT</b>						
Mumbai	181,158	124,026	57,463	21,839	21.3	25.8
Delhi	105,329	87,018	26,531	10,460	20.5	31.8
Chennai	35,941	32,412	13,870	6,654	15.8	21.0
Kolkata	28,205	23,735	13,562	7,729	11.9	15.8
All-India	683,591	556,436	254,692	124,203	15.4	21.8

Source: Banking Statistical Returns, Reserve Bank of India.

## Major Centre-wise Turnover in Stock Exchanges

Stock Exchanges	Turnover (Rs. Crores)		% of Total Turnover	
	1999-2000	2000-2001	1999-2000	2000-2001
Total	2,067,031	2,880,804	(100)	(100)
<i>Of which:</i>				
Mumbai: (NSE)	839,052	1,339,511	40.52	46.50
(BSE)	685,028	1,000,032	33.08	34.71
Kolkata	357,166	355,035	17.25	12.32
Delhi	93,289	83,871	4.51	2.91
Ahmedabad	37,566	54,035	1.81	1.88
Uttar Pradesh	24,048	24,747	1.16	0.86
Bangalore	11,147	6,033	0.54	0.21
Ludhiana	7,740	9,732	0.37	0.34
Pune	6,087	6,171	0.29	0.21
OTCEI	3,588	126	0.17	0.00

Source: SEBI, Annual Report 2000-01



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