

**ECONOMIC RENEWAL OF MUMBAI CITY:
OPPORTUNITIES AND CONSTRAINTS**

By

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Abstract

Economic Renewal of Mumbai City is in the realm of possibility. It will require a concerted and co-ordinated effort of the Government, the Private Sector and its citizens to remove the obstacles to foster development and towards making Mumbai a nationally and internationally desirable destination for business and investment. This article outlines the basic ingredients of a plausible development strategy for the city of Mumbai. The article highlights four important and interdependent pillars of such a strategy. These include: providing world class physical infrastructure, improving social amenities, deepening financial markets, and strengthening institutions in new ways to compete and collaborate at the global level. The article also stresses that a proper strategy for urban renewal can pave the way for emergence of Mumbai as an international financial centre.

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Introduction

The image of Mumbai as the mega city of India is firmly etched in the minds of the people everywhere. In a way, Mumbai provides the crucial link between India and the West. No city in India has evoked as much admiration as the city of Mumbai. It is regarded as a city of challenges, opportunities, guts, hope, peaceful co-existence and above all, a city of dreams. Mumbai is also a land of civil contradictions, *i.e.*, a population of 11.9 million, the financial and commercial capital of India with a highly sophisticated financial infrastructure consisting of banks, insurance companies and stock exchanges, the glitterati of Hindi films, while at the same time, a large proportion of population living in the slums, an urban infrastructure seemingly on the verge of a break-down, sky scrapping property prices, organised crime and much more.

Globalisation has changed the pattern of urbanization in a significant way. The interest of foreign investors are directly linked to the modernization, connectivity, skilled workforce and cost competitiveness. In recent years, the relative attractiveness of Mumbai to the foreign investors has declined in comparison to emerging cities like Bangalore, Hyderabad, Gurgaon and Pune.

The present paper analyses the challenges that confront Mumbai in this era of globalisation. The paper identifies some constraints that act as a drag on the performance of Mumbai and suggests strategies that can possibly contribute to the economic renewal of the city. Section II highlights the role of

Mumbai in the Indian economy. Section III explores the major constraints that inhibits the progress of the city. Section IV presents the four pillars of a strategy of economic renewal of Mumbai. The last section offers some concluding remarks.

II. Role of Mumbai in the Indian Economy

Mumbai is the prime economic engine of India. Mumbai and its surrounding regions contribute to one-fifth of GDP. The Bombay port handles 46 per cent of the foreign trade and Bombay pays one-third of the income-tax of the nation. Out of the tax revenue generated by the four metros, Mumbai contributed to about 50 per cent. While Mumbai accounts for only over 0.14 per cent of the land mass of Maharashtra and 0.01 per cent of the land mass of India, respectively, the city contributes as much as 22 per cent and 3 per cent of the income of the State and the Country, respectively.

In spite of its stature as an economic giant, Mumbai has shown signs of slowdown in the dawn of the new millennium. Despite this impressive past, Mumbai, with its swelling population, deteriorating environment, income contrasts and inadequate infrastructure is at a crucial juncture. This is of course, not unique to Mumbai, the same problems is faced in most cities of India including Delhi, Bangalore, Chennai, Kolkata and Hyderabad. This is due to the fact that while the Indian population expanded three times since the Independence, the urban population has expanded five fold (Table 1 presents time series data on urbanization in India). Consequently, massive efforts towards revitalising the cities are necessary for their own survival. There is no doubt that, in this globalizing age, there are risks as well as opportunities. If the risks are contained and mitigated and steps are initiated to take advantage of the emerging opportunities through a forward looking

approach, Mumbai can emerge as a world class city, and a regional hub for world investment and capital flows. It also has the potential to become the conduit through which the rest of the world can channelise its resources to Asian countries. In order for that to happen, it has to correct the existing deficiencies.

Table 1 : Urban Population in India, 1951-2001

Census Year	Number of UAs/Towns	Total Population (in millions)	Rural Population (in millions)	Urban Population (in millions)	Urban Population as percentage of total Population
1951	2,822	361	299	62	17.3
1961	2,334	439	360	79	18.0
1971	2,567	548	439	109	19.9
1981	3,347	683	524	160	23.3
1991	3,769	846	629	218	25.7
2001	4,378	1,027	742	285	27.8

Source: Census of India, 2001.

Table 2 - Mumbai, Maharashtra and India - A Comparison

Item	Mumbai	Maharashtra	India	% Share of Mumbai in Maharashtra	% Share of Mumbai in India
Area(Sq. Km)	437**	3.08 Lakh	32.87 Lakh	0.14	0.01
Population (million)	11.9	96.8	1027	12.2	1.1
Gross Density(No. of persons per Sq.Km)	20,222	314	324		
Per Capita Income (1998-99) (in Rs.)	45,471	22,763	14,712		
NDP (1998-99) (Rs. Crore)	44,489	204,120	1,449,424	21.8	3.1
Total Regd. working factories(number)	7,212	28,949	255,837	24.9	2.8
Total Workers in factories (number)	382,700	1,251,759	10,716,000	30.5	3.6

Source: Bombay first, Fact Book on Mumbai, 2003.

II: Constraints to Urban Renewal

There are several constraints to revitalizing the city and to effectively cope with domestic and global competition.

Mumbai's Population Explosion and the Slum Problem

Mumbai's population problem has attracted good deal of attention. The Report of the Study Group on Greater Bombay had observed, way back in 1959:

*"There has been a phenomenal increase in the population of Bombay The enormous increase in population has resulted in congestion of traffic, deficiency in open spaces, play-fields for schools, over-crowding in trains, over-crowding in houses, creation of slums etc. The increased population has also constituted an increasingly intolerable burden on the sanitary services and public utilities (p. 10)."*¹

Mumbai accounts for 12 per cent of Maharashtra's population and for 1.1 per cent of that of the country. Between 1951 and 1991, the rate of growth of population had slowed down (Table 3).

Table 3: Population of Mumbai

Year	Population (in million)	Rate of Growth (%)	Decadal increase (in million)
1951	3.0	5.1	1.0
1961	4.0	3.3	1.0
1971	6.0	3.6	2.0
1981	8.0	3.2	2.0
1991	9.9	1.9	1.9
2001	11.9	1.9	1.9

Source: Bombay first, Fact Book on Mumbai, 2003.

¹ The Report of the Study Group on Greater Bombay, constituted in 1959 by the Government of Bombay under the chairmanship of Shri S. G. Barve, Secretary of the Public Works Department, and the increase in population referred to the period during 1941 through 1958.

With a population density of over 20 thousand people per sq. Km as per the 2001 Census, Mumbai accounted for more than 1 per cent of India's population with only 0.01 per cent of the country's landmass. Estimates by the UN suggest that Mumbai is likely to have a population of 22 million by 2015(Table 4). Such a high level of population will put enormous burden on urban infrastructure and would lead to further pressure on slums.

Table 4: Projected Population of Mega Cities

	(millions)			
	2000	2005	2010	2015
Mumbai	16.1	18.3	20.5	22.6
Delhi	12.4	15.3	18.2	20.9
Kolkata	13.1	14.3	15.5	16.8
Chennai	6.4	6.9	7.5	8.1
Bangalore	5.6	6.5	7.5	8.5
Hyderabad	5.4	6.1	6.8	7.5

Source : U.N. World Urbanization Prospects : 2003

The slum population is already high in Mumbai. The first and last census ever conducted of Mumbai's slums by the Maharashtra government was in 1976. It showed that there were roughly 29 lakh slum dwellers in 1,680 pockets. Five years later, in 1981, the government estimated that the population living in the same slums were 38 lakh. Authoritative researchers like Lalit and Sudha Deshpande have assumed that the slum population grew as fast in the decade 1981-1991 as it did between 1976 and 1981. On this basis, they estimated the city's slum dwellers at 68 lakhs in 1991. This works out to a staggering 68 per cent of Mumbai's total population in 1991. A related question would be why is that Mumbai has experienced such a population explosion? It is well known that in any city like Mumbai which offers some avenues for better livelihood would attract people from less developed regions, or regions with less economic opportunities. Economists like Michael

Todaro explained this rural urban migration in terms of expected wage differential between the two regions. Sociologists refer to pull and push factors of migration – people who are drawn to bright lights of the city are results of “pull” migration while people who are forced to leave their ‘homes’ are the outcome of “push” migration. A priori it may be difficult to segregate the two kinds of migration, and in reality the decisions to migrate could be an outcome of these two factors interwoven. As per the 1991 Census, “net migration”² as a percentage of decadal increase in Maharashtra’s population during 1981-1991 was of the order of 16.7 per cent – this was a reduction from a whopping 47 per cent during 1971-81, or 48.7 per cent during 1961-1971 (Table 5). Preliminary estimates published in Economic Survey, 2002-03 of the Government of Maharashtra, reveal that migration seemed to have constituted around 23 per cent in population growth during 1991-2001. In other words, one out of every five persons added to the population during the decade of 1990s was due to migration!

Table 5 : Net Migration to Mumbai City (in lakhs)

Year	Net Migration (in mn)	Net Migration as % of decade increase
1951	9.5	79.7
1961	6.0	51.8
1971	8.9	48.7
1981	10.7	47.0
1991	2.8	16.8

Source: Bombay first, Fact Book on Mumbai, 2003.

What should be done? First, as far as intra-state migration is concerned, it may not be an exaggeration to say that this is an outcome of the lop-sided agricultural growth within Maharashtra. Thus, the solution will lay either in revival of agricultural growth or in rural industrialization, so that the relative

² “Net migration” is defined as the inflows of people into a region or country minus the outflows. Net migration can be measured in three different ways: as the total flows, short-term flows, or permanent and long-term flows. Here, the definition relates to total flows based on Census data.

attractiveness of city gets reduced. In the context of India, Mohan (2004) has argued that lack of rural employment opportunities are at the root of the migration to major cities. Coming to inter-State migration, no island-like solution would work effectively in an era where boundaries – national or regional - are fading away. Nevertheless, there are views that Mumbai should not be paying for her success, and in the devolvement of resources between the Centre and the States, suitable adjustment factor could be introduced to take care of the migration.

Developing Physical Infrastructure

The crucial issue that attracts immediate attention during any discussion on enhancing Mumbai's current standing is the adequacy and quality physical infrastructure facilities in the city. Lack of adequate and efficient infrastructure can cost the city significantly, in terms of relative attractiveness to the investor community. In an era of globalisation, the international competitiveness of a country is crucially dependent on the kind of infrastructure it provides (Fujita et. al , 1999). Transport costs, in fact, play a crucial role in deciding locations of production, alongwith market proximity and product concentration (Krugman, 1991 ;Baldwin et al, 2003) In order to prevent such shift of investible resources, Mumbai should proactively strive for efficient infrastructure to survive the competition for domestic and external investments. Also, empirical evidence with regard to the impact of infrastructure on growth, though inconclusive, tends to suggest two interesting points. First, growth is positively related to the stock of infrastructure assets, and second, income inequality declines with higher infrastructure quantity and quality. These two results combined together suggest that infrastructure development can be highly effective not only in promoting growth, but in reducing poverty and income inequality. Recent research from the World Bank demonstrates that in Latin American countries,

these impacts are economically quite significant in terms of growth acceleration and inequality reduction.³

Transport Infrastructure

Three areas of physical infrastructure need urgent attention. The first is the development of an efficient transport system. Existing rail and road network fail to effectively keep pace with traffic growth leading to heavy congestion. Inadequate road network and maintenance slows down traffic. Not surprisingly, commuters from suburbs show a distinct preference for trains. The lack of east-west connectivity poses yet another major concern in ensuring smooth traffic flows. These apart, a large number of road development projects in Mumbai are either proposed, announced or under implementation. The road projects are being undertaken by the State Government through the PWD or MSRDC.

Further, Mumbai's connectivity to other region outside Mumbai with industrial belts also assumes significance in this regard. There is strong evidence that infrastructure clusters lead to a stronger growth performance through the efficient utilization of inherent externalities (Fujita and Thisse,2002). In the context of Mumbai, there is considerable scope for improving connectivity between Mumbai, Pune and Nashik and creating a golden triangle. This can enable the cities to develop at a faster pace.

The Honourable Finance Minister in his Budget Speech for 2005-06 has announced that transport plans for Mumbai including metro rail project, trans-harbour railway link and western expressway sea-link would now be addressed through the National Urban Renewal Mission. This is an extremely welcome development in addressing infrastructure challenges faced by the city.

³, César Calderón and Luis Servén, The Effects of Infrastructure Development on Growth and Income Distribution World Bank Policy Research Working Paper, 3400, World Bank, 2004.

The Airport, providing international and domestic connectivity needs to improve considerably. Presently, it handles 30 per cent of India's total passenger traffic and 38 per cent of the international traffic. An efficient airport gives a very positive image of the economy to the investor community (Tables 6 and 7).

Table 6: Passenger Traffic at Airports (no. of passengers)

Year	Mumbai	All Airports in India	Mumbai Share in India (%)
1995-96	11,117,400	37,013,800	30
1996-97	11,067,400	36,489,900	30
1997-98	11,010,606	36,530,693	30
1998-99	11,018,557	36,989,419	30
1999-2000	11,532,144	39,004,933	30

Source: Bombay first, Fact Book on Mumbai, 2003.

Table 7: International Passenger Traffic Handled

Year	Passenger handled (Nos.)		Mumbai's Share in India%
	Mumbai	All Airports	
1995-96	4,616,400	11,449,800	40
1996-97	4,760,200	12,209,800	39
1997-98	4,898,052	12,775,781	38
1998-99	4,837,415	12,916,788	38
1999-2000	4,998,171	13,259,493	38

Source: Bombay first, Fact Book on Mumbai, 2003.

Availability of Affordable Housing

Another major challenge faced by the city is availability of affordable housing. Lack of affordable housing has been compounded by lack of various social amenities.

A closer look at urbanization and basic urban infrastructure provision in the Indian context reveals that the urban quality of life has improved to an extent for large sections of the population, in the last couple of decades. The percentage of households with a safe drinking water facility in urban areas

increased from 75.1 to 81.4 during 1981-91, according to the Population Census. The corresponding figures for electricity are 62.5 and 75.8 while those for toilets are 58.2 and 63.9 respectively. This implies that safe drinking water has been provided to more than 57.3 million people during 1981-91 which was more than the population of the United Kingdom in 1991. Similarly electricity has been provided to an additional 65 million people in a decade while those with access to toilets in urban areas have been an additional 46.2 million people or more than 9 million households. Yet, clearly much remains to be done.

A lot of improvement needs to be made, as revealed by a Survey of Mumbai slums.⁴ For instance, while 51 per cent of Mumbai's slum population covered by the survey used toilets, 49 per cent used open defecation. In respect of wastewater discharges, in Mumbai, access to sewer is only available to a paltry 1.5 per cent of urban poor. According to the survey, 91.8 per cent live in one roomed houses, 60 per cent in houses of temporary nature. Also, a large proportion of population suffer from water-related diseases such as Diarrhoea, Malaria and Typhoid.

Management of Solid Waste

Yet another challenge lies in effective management of solid waste. The city of Mumbai generates 7,500 tonnes of waste per day. Available land for filling the waste is inadequate. The three main land-fill areas in Deonar, Mulund and Borivli may be inadequate and transporting wastes out of the city may turn out to be expensive. So, there is a strong felt need of processing the waste within Mumbai. Creating public awareness and use of modern technology for recycling are the need of the hour. A comparable example in this context is the city of Beijing, which is gearing up for the Olympics in 2008.

⁴ Karn, Shikura, Harada, EPW, August 20, 2003.

It has given priority to solid waste management in the city along with its rapid drive towards uplifting the city towards international benchmarks.

Water Supply

The water supply to Mumbai from various sources is about 563 million gallons per day (MGD). The monsoon precipitation is collected in six lakes and supplied to the city through the year. 460 MGD are treated at the Bhandup Water Treatment Plant, the largest in Asia. Water is brought into the city from the lakes after treatment, and stored in 23 service reservoirs. Since two of the major sources, Tansa and Lower Vaitarna, are at a higher level than the city, not much power is required to pump the water. Water production costs Rs. 24 per 10,000 litres. While domestic users pay Rs.6 for 10,000 litres for consumption, there is a system of cross-subsidy where the commercial user pays Rs. 150 for 10,000 litres.

A World Bank report estimated that the demand in the Bombay Metropolitan Region (BMR) is 3,026 million litres per day (MLD) and the supply is 2,474 MLD. Thus, presently only 65 per cent of Mumbai's demand for water was met. Considering the fact that the demand is expected to rise further, new sources can be mobilised and something tangible needs to be done in this respect.

III. Strategy for Economic Revival: The Four Pillars

In the past few years, the interest in the revival of the city of Mumbai has found expression in several reports. The key reports prepared in this context include:

1. The McKinsey- Bombay First Report (September, 2003), Vision Mumbai-Transforming Mumbai into a World-class City.
2. Transforming Mumbai into a World Class City, Government of Maharashtra, February 2004 (First Report of the Chief Minister's Task Force).

Let us look at the main suggestions of the reports:

McKinsey Report (September, 2003) Vision Mumbai- Transforming Mumbai into a World Class City, advances a multi-pronged strategy

1. Boost economic growth to 8-10 per cent per annum by focusing on services (high- and low-end), developing hinterland-based manufacturing and making Mumbai a consumption centre.
2. Improve and expand mass and private transport infrastructure, including linkages to the hinterland.
3. Dramatically increase low-income housing availability (1.1 million low-income houses) and affordability and drive upgradation of housing stock.
4. Upgrade safety, air pollution control, water, sanitation, education and healthcare.
5. Create a dedicated "Mumbai Infrastructure Fund" with an annual funding of Rs. 1,500 crore and attract debt and private financing.
6. Make governance more effective, efficient and responsive by corporatising key departments and streamlining important processes such as building approvals.
7. Generate momentum through more than 20 quick wins to show visible on-the-ground impact during the next 1-2 years.
8. Enable implementation through committed public-private resources, led by the Chief Minister and make key government organisations accountable for results.

Transforming Mumbai into a World Class City, Government of Maharashtra, February 2004 (First Report of the Chief Minister's Task Force)

The report attempts to chart a sustainable future for Mumbai. It suggests that a sustainable transformation should have three elements: sound finances, able implementation and public support. To ensure reliable funding, the Report propose a dedicated developments fund for Mumbai. In order to ensure that change materializes efficiently, the report recommends that two citizens' committees drive the programme and track progress by employing implementing agencies.

With regard to creating the implementation apparatus, the Report proposes public-private partnership to drive the programme. It recommends the formation of an Empowered Committee as a permanent successor to this task force. This committee will include civil servants, private citizens and representatives from the implementing agencies and will be chaired by the Chief Secretary. It will sign MoUs with agencies, administer the MDF and shortlist projects to be financed.

The study emphasises that the success of developing Mumbai to a global city depends on many different organisations: MCGM, MMRDA, SRA, BEST, MSRDC and others. To ensure that they carry out the citizens' mandate, the Report proposes the formation of a Citizen's Action Group, made up to eminent citizens of Mumbai and chaired by the Chief Minister. The group will ensure that implementation is timely and up to world-class standards.

The Report also talks about affordable housing, slum development, urban renewal, promoting physical infrastructure and economic growth. Thus, it stresses a multi pronged co-operative framework for the development of Mumbai into a global city.

The Four Pillars of Economic Renewal of Mumbai City

In my view, the four major pillars of economic renewal of city like Mumbai would include : (a) Improving Infrastructure ; (b) Enhancing access to social amenities; (c) Deepening financial markets and (d) Strengthening institutions and governance.

Pillar I : Improving Infrastructure

Private investment in the provisioning of so called public goods should be allowed to flourish in such a way that high service levels are achieved at low economic and financial cost. This is indeed possible through extensive use of private initiatives within a public regulatory framework. This would require Public Private Partnerships (PPP), executed in a well-calibrated manner.

Transparency of Procedures

PPPs are contractual agreements between the public sector and the private sector enterprises. International experience clearly points out to the fact that unless the contractual arrangements are not well thought out and transparent such contracts need to be renegotiated as the project goes on and as the risk profiles keep changing. As a matter of fact, structured and transparent policies can go a long way to encourage private sector participation in infrastructure.

Risk Allocation

As infrastructure projects need huge investments, the participating agents face a variety of risks , including financial risk, performance risk, demand risk , price risk and other residual risks. A proper, pre-defined risk allocation mechanism is crucial for the sustenance of PPPs.

Proper Project Appraisals

The existence of information asymmetries give rise to the reluctance of investors and lenders to invest in urban projects. The government could possibly involve funding professional institutions specialized in such appraisal techniques, who can then build professional credibility and provide project appraisals that are respected, and thus address asymmetries effectively.

Housing and Land Development

A key problem will be to manage a fast expanding supply of developed urban land for housing and other purposes. Rapid in-migration makes the demand for housing grows much faster than normal population growth. Land development induces investment in infrastructure such as water supply, sewerage, roads and power supply. All this requires substantial front-end investment.

Developing High-technology Enterprise Zones

To provide the physical and support infrastructure for agile manufacturing enterprises, cities can establish high-technology enterprise zones. Cities in China, Japan, the United States, and Europe have developed high-technology zones or parks. These zones provide a business climate suited to the needs of firms engaged in international trade that use agile business practices. The zones are organized around high-performance core industrial networks: hub companies and their major suppliers. Those companies locating in the zones enjoy more flexible regulatory treatment and tax incentives as well as expedited customs clearance of imported and exported materials and goods. The zones provide multimodal transport and

communications infrastructure systems to facilitate global logistics and production and just-in-time inventory and production processes.

The IT Sector

Out of India's total exports, the share of IT products (mainly software) has increased from 1 per cent in the early 1990s, to 18 per cent in 2001. The recent encouragement of foreign direct investment in the sector has further spurred growth. The southern cities of Bangalore, Hyderabad, Chennai, Mumbai and Pune have emerged as competitive IT hubs. Key factors in this take-off have been the existence of a skilled, English speaking workforce, and the fact that the software industry was not part of the license raj regime.

Mumbai, the financial and commercial capital of the country, provided the initial lead in the Infotech Industry. Despite competition from Bangalore, Mumbai has created a niche in the IT industry scenario of India, with a large number of multinationals as well as small software units located here. The Santacruz Electronic Export Processing Zone (SEEPZ) has a concentration of IT companies and has served as the focus of IT development of the city. A software technology park offering plots to IT companies is also being planned adjacent to SEEPZ. The International Infotech Park in Vashi, Navi Mumbai offers over 6 lakh square feet of built-up area for IT offices. The International Infotech Park (IIP) is designed to meet the requirements of all IT companies in one single location so as to have very little gestation period for a company to start its operations. This Park is expected to generate more than 16,000 direct jobs and around 24,000 to 30,000 ancillary jobs. The presence of 16,000 professionals is expected to also generate significant demand for various urban services and retail sales.

Pillar 2 : Enhancing access to social amenities

As discussed, the social amenities are far from adequate in the city of Mumbai. In order to fulfilling the basic needs of Mumbai's burgeoning workforce, it is crucial that the social amenities be improved significantly. In Indian cities, the social amenities have increased quite markedly over the last few decades (Table 8). On the flipside, much more needs to be done, in most cities and Mumbai, to cope up with unmet demand and additional demands created by net migration to the city.

Table 8: Availability of Social Amenities : Urban India

NSS Round	Survey Period	Per cent of Urban Households with Sole Access to Drinking Water	Per cent of Urban Households with Sole Access to Latrine
28th	Oct 73 to June 74	23.2	24.1
38 th	Jan to Dec 83	-	26.8
44th	July 88 to June 89	34.8	36.7
49th	Jan to June 93	40.2	40.4
54th	Jan to June 98	41.3	46.1

Source : National Sample Survey (NSS) 54th round 1998.

Developing Educational Infrastructure

The labour-force characteristics of urban areas will fundamentally and pervasively affect the ability of their businesses and industries to produce goods and services for export and to participate effectively in other international economic transactions. One of the most important features of internationally competitive cities in the future will be their capacity to mobilize skilled labour and managerial resources quickly and efficiently for new tasks as global business opportunities change. The most competitive cities recognize that global enterprises must be located near or have access to knowledge centres that can generate or stimulate innovation and provide a reliable source of skilled workers, technically trained supervisors, scientists,

engineers, and managers. At both the secondary and higher education levels they must focus on teaching how to learn and re-invent, because knowledge of the learning process will become far more important to professionals in a globally competitive world. A strong foundation in fundamentals must be built on a process of teaching that creates the capacity for lifelong learning. There is a need to foster PPPs in the education sector.

Enhance Civic Leadership and Community Action

To attract and sustain technology-based manufacturing and services activities that are internationally competitive, urban leaders would have to promote a common civic perspective in the public and private sectors and a positive attitude about a city's or metropolitan area's comparative advantages. An urban culture that encourages and supports cooperation among the public, private, and civic sectors to anticipate and adapt to change is crucial for competitiveness in a global economy. In every city that has successfully restructured its economy, changes came through concerted action and civic commitment.

Pillar III : Deepening Financial Markets

To alleviate the hindrances to the rapid growth of the city of Mumbai, considerable financing will be required. International experience clearly shows that while the share of Government and Official Development Assistance still constitute four-fifth of total financing in the infrastructure, though these forms of assistance are gradually getting reduced (Briceno et al, 2004). Consequently, an increasing amount of funds for urban development will have to come from the financial savings of households and private sector, and the process will be facilitated by strong financial institutions and well-functioning financial markets (Easterly and Serven, 2003).

Revitalizing the city of Mumbai would require simultaneous development of all segments of financial market i.e., money market, government securities market, corporate debt market, foreign exchange markets and commodities market because the transactions in all these markets are getting highly interlinked. While some segments of the markets have achieved adequate depth, some still lack liquidity and cling to low volume of transactions. To provide a fillip to the development of a vibrant financial market in Mumbai, the following points need to be considered.

1. The Indian debt market ranks third in Asia, after Japan and South Korea in terms of issued amount. While substantial enabling changes including regulatory reforms and infrastructure deepening have taken place in the government securities market, some of these have not as yet taken place in the corporate debt market. There are also strong needs to improve the quality of corporate debt issue. The shallowness of Indian debt markets in terms of number and variety of players is another issue that needs attention. The Annual Policy Statement for 2005-06 has attempted to deepen the debt market . As Governor Dr. Y.V. Reddy has noted, “The number of actively traded securities need to be enlarged to enhance liquidity and improve pricing in the market. It is proposed to consolidate debt and build up large liquid securities in consultation with the Government while continuing the programme of reissuances” (pages 29-30).
2. The average monthly total turnover in the Indian foreign exchange market increased sharply to US \$ 174.7 billion in 2003-2004 from US \$ 130 billion in the previous year. However, the Indian forex market is predominantly a transaction-based market with the existence of underlying forex exposure generally being an essential requirement for market users. While this, to a large extent, reflects prudential concerns of the authorities against destabilising speculative transactions, for the development of Mumbai as a regional financial centre, possibilities of forex operations other than the transaction-based ones need to be considered.
3. In terms of sequencing, forex markets have to be aligned to external sector reforms and development of financial markets as part of overall reform. Further liberalisation in forex markets have to be harmonised with progress in other areas. Technical Advisory Committee (TAC) on Money and Securities Markets set up by RBI in 1999 has been

expanded in 2004 to include forex markets and the Committee has been renamed as TAC on Money, Securities and Forex Markets. A Committee has been set up to undertake a comprehensive review of the liberalisation process set in motion in the last decade, study recent international experience and identify various options for future forex market development in India. The Committee will interact with market participants and experts for this purpose. On the basis of the suggestions, a road map will be drawn up for further liberalisation to reach global standards. The need for collaboration and consultation between regulatory authorities and market players in the process of development of any market.

In the Annual Policy Statement for the year 2005-06, the foreign exchange market was further liberalized with the following measures:

- § Cancellation and rebooking of all eligible forward contracts booked by residents, irrespective of tenor, to be allowed.
- § Banks to be allowed to approve proposals for commodity hedging in international exchanges from their corporate customers.
- § The closing time for inter-bank foreign exchange market in India to be extended by one hour up to 5.00 p.m.
- § Dissemination of additional information including traded volumes for derivatives such as foreign currency-rupee options to the market. (Annual Policy Statement, page 31)

4. The Over the Counter (OTC) interest rate derivatives were introduced in 1999. The volume in the market has grown noticeably with the outstanding notional amount at around Rs. 6,40,000 crore. However, there has been some apprehension regarding legality of OTC derivatives with section 18A of the Securities Contracts (Regulation) Act, 1956 (SCRA), making only derivatives contracts that are executed on exchanges legal and valid. Accordingly, certain modifications by way of supplementary provisions to the proposed amendments are under discussion to ensure that the proposed amendments do not jeopardize the legal status of OTC derivatives. Specifically, it has been suggested that section 18A be amended so as to make contracts of the class and nature as notified by RBI legally valid, even if they are not traded on any recognised stock exchange. Exchange traded derivatives have their own role to play in the debt market - but by their very nature they have to be standardised products. OTC derivatives, on the other hand can be customised to the requirements of the trading

entities. Thus both OTC and exchange traded derivatives are essential for market development.

5. The private corporate debt market, in the absence of a well functioning secondary market, remains illiquid and unpopular among the investing population. To help in the further development of the corporate debt market, a Group has recently been set-up with the participation of RBI, SEBI and other market participants. Among others, the group intends to look into the following issues:
 - Examination of the issues relating to primary issuances as well as growth of secondary market of corporate debt securities in the light of international experience.
 - Examination of the regulatory aspects for the development of the market for Asset Backed Securities (ABS) and Mortgage Backed Securities (MBS).
 - Analysing the issues relating to trading, settlement and accounting of corporate debt securities including the issue of DvP settlement for corporate debt market.
 - Suggesting measures to enhance transparency in pricing and valuation of corporate debt securities.
6. The securitisation market has been growing at a rapid pace, particularly after the SEBI/RBI introduced regulations on the private placement in debt market. To encourage the growth of this market, the Reserve Bank excluded investments in ABS/ MBS from the 10 percent ceiling on the investment of banks in unlisted non-SLR securities. However, several issues relating to regulation, listing and improvement of liquidity need to be addressed. Most MBS/ABS are issued by Special Purpose Vehicles (SPVs) in the form of trusts which are not regulated. ABS/MBS issued by trusts cannot be listed, although these are rated. Only the securities issued by the companies can be listed. On the other hand, there is legal ambiguity on the status of the listing of ABS/MBS. Exchanges reportedly sought SEBI's clarification on the issue and it is learnt that SEBI preferred an unambiguous enabling provision in the SCRA that these mortgage-backed securities can be listed. Even in the case of U.S.A., where the ABS/MBS market is very large, the regulatory process is still evolving. In fact, the SEC is proposing comprehensive new and amended rules and forms covering registration, disclosure and reporting requirements for ABS and MBS under the Securities Act of 1933 and the Securities Exchange Act of 1934.

7. As in the world's largest bond market, the United States, there is a large number of municipal authorities, urban development authorities, state government SPVs and the like who could potentially issue bonds for infrastructure financing, if they can become credit worthy. With the increasing role of the private sector in infrastructure, there can also be a large number of private sector issuers. On the investors' side, as more private insurance companies enter the market and expand, and pension funds come into existence along with provident funds, there will be increasing demand for medium and long-term safe debt instruments.
8. There are some of the other pre-conditions that still need greater attention. First although there has been some progress in the enforcement of creditors' rights, the legal and regulatory system still has a long way to go in this area. The implementation of bankruptcy laws is very tardy so bond investors would have to wait a long time to get any compensation from defaulting companies. Second, the interest rate derivatives market is in its infancy and needs greater development for the easy access of hedging instruments to bond investors. Third, brokerage systems for retailing of either government securities or corporate debt instruments have yet to develop. What the retail investor wants is transparency in pricing, confidence regarding repayment, simplicity and convenience of dealing in the market and low cost. There must be adequate liquidity to enable ease of entry and exit. This is difficult to achieve without the presence of market makers who can provide buy/sell quotas on a regular basis, and also have the ability to operate in the market with adequate volumes - a role similar to that of primary dealers in the government securities market.
9. The Government Securities Bill that will facilitate lien-marking pledge of securities for raising loans against government securities etc., though approved by the Cabinet has not yet been passed. The Government Securities Act would pave the way for the introduction of STRIPS. Coupon rates are already being aligned for introduction of STRIPS and the necessary software has also been put in place.
10. Regarding banking industry, technological intensity is one area where perhaps we need to do significant 'catching up', notwithstanding the rapid strides made over the last few years, though data on this score are difficult to come by. Some available figures indicate that in late 1999, the percentage of customers using online banking was less than 1 per cent in India, compared with anywhere between 6-30 per cent in developed economies like US, UK, Germany, Finland and Sweden. Even in Latin America, these figures are much higher than for India.

While admittedly the numbers for India are likely to be much higher at present than these figures suggest, so would be the case for these other economies as well. The issue, therefore, remains what has been the extent of 'catching up' by India on this score? In fact, this seems somewhat intriguing: India happens to be a world leader in information technology, but its usage by our banking system is somewhat muted. It is wise for Indian banks to exploit this globally state-of-art expertise, domestically available, to their fullest advantage. Governor Dr. Y.V. Reddy in the Annual Policy Statement for the year 2005-06 has taken the pro-active stance in developing technology, and payment and settlement system. The major measures in the area include :

- § A roadmap for upgradation of payment systems was drawn up for implementation in the next three years (2005-08).
- § a Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) was constituted as a Committee of the Central Board of RBI as notified in the Gazette of India on February 18, 2005
- § The Reserve Bank proposes operationalisation of National Electronic Funds Transfer (NEFT) System, which would enable T+0 settlement for all networked branches of banks all over the country for electronic transfer of funds.
- § In order to facilitate non-networked branches of banks to transfer funds electronically, the NEFT (Extended) System would be implemented under which these branches could access NEFT-enabled branches of banks for transfer of funds.

Pillar IV : Strengthening Governance

National Level Co-ordination

At the national level, the ministry of urban development now has a crucial role in co-ordinating urban planning and development to fulfil the vision expressed in the Budget. Since most the work in urban development planning is envisaged at the State level, the role of the central ministry has so far been mainly as a nodal organization for coordinating action, providing technical advice and working out detailed urban investment implications. Establishment of the National Urban Renewal Mission (NURM), as announced by the Finance Minister in the Budget Speech for 2005-06, is a

welcome development in this regard. NURM is designed to meet the infrastructure needs of the major urban centers including the seven mega cities. The Union Budget proposes to make an outlay of Rs. 5,500 crore for NURM in 2005-06, including a grant component of Rs.1,650 crore for the Mission. Over and above such financial support, the technical support arm of urban planning and development at the national level should be capable of leading urban policy making and would need to be at the cutting edge of urban research. The organization would need to develop systems for improving information on cities and monitoring of investment programs of these cities by standardisation of data requirements, technologies of locationalising data etc. This would go a long way in systematizing urban development processes

Making the Government Machinery Work

There are felt needs to strengthen city management. City managements will have to manage and cope with large financial requirements for all kinds of investment for infrastructure service provision. Given the overall fiscal constraints at present, resources will have to be raised increasingly at the local level. Thus urban local governments have to be strengthened at all levels, and made creditworthy. In order to learn lessons on governance, Indians need not go to Singapore or Sanghai. Closer home, in 1994, Surat was reeling from an attack of the plague and a deluge of floods. The new Municipal Commissioner appointed zonal officers and mandated heads of municipal divisions to spend half their day on walkabouts monitoring city cleanliness. He also welcomed private sector participation. Consequently, Surat rebuilt itself without any aid from state or national government and became the second cleanest city in India (after Chandigarh). Similarly, Nagpur and Thane were both improved vastly by the efforts of their new Municipal Commissioners who improved the efficiency of government machinery by setting targets, making senior

government officials accountable for results, monitoring daily progress and penalising non-performers. Consequently, both cities today enjoy wider roads, a cleaner environment, fewer slums and more low-income housing.

Decentralization and Self Financing

There is a strong need to decentralize the instruments of infrastructure provision so that the agencies providing such infrastructure services are able to finance themselves and can respond flexibly to the changing demands of a growing city. While self financing may be seen as rationalization of user charges, it does not necessarily imply commercial financing.

Dismantling Excessive Controls

The Tenth Five Year Plan underscores a growing recognition of the need to (i) dismantle the extensive controls on urban real estate markets, many of which were established during the years 1975-77, at the national level, and which have deprived cities of the tools to effectively ensure an adequate market-driven supply response to growing urban demand for land and services

Rationalisation of Tax structure

Mumbai is in the prime position of being able to attract new manufacturing investments. Government, therefore, should move towards reducing or eliminating octroi, reducing sales tax, road tax and stamp duty rates while increasing user charges.

Property Tax

Some rationalisation also have to be considered for taxation of property, as market valuation of such properties have seen huge shifts. A carefully crafted reform in property taxation will not only rectify imbalances in the current system, but also generate additional revenues. For example,

South Mumbai's property tax rate is estimated to be a meagre 0.002 per cent of capital value, compared to international benchmarks of 1-2 per cent.

VI. Mumbai as International Financial Centre

The four pillars of urban renewal are necessary preconditions for the emergence of Mumbai as an international financial hub. Perception of Mumbai in the 'resurgent' India has been most aptly captured by the Honourable Union Finance Minister Shri P. Chidambaram in his budget speech delivered on February 28, 2005. The Honourable Minister notes:

When I look at the map of the world, I am struck by the strategic location of Mumbai. It lies almost midway between London and Tokyo, two nerve centres of world finance. Mumbai is also home to the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE) which now rank no.3 and no.5 among the stock exchanges of the world by the number of trades per year. In the last decade, we have built world class institutions on the securities markets and we now compare with the best in terms of technological sophistication, risk management and sound governance. I believe the time has come to begin work on making Mumbai a regional hub for finance.

He has reinforced our long cherished dream – to steer Mumbai to become a regional financial hub, a gateway for the country as well as others in the region to the global financial system. The Honourable Minister has proposed that in consultation with the Reserve Bank, he would appoint a high powered Expert Committee to advise the Government on how to make Mumbai a regional financial centre.

In recent years, Asia has seen a large number of serious contenders aspiring to become important financial centres in the region. While Tokyo and Singapore are the undisputed financial centres in the Asian region, other centres like Shanghai, Hong Kong, Bangkok, Jakarta and Taipei are also emerging as powerful alternatives in the region.

Financial centres can be classified according to their importance and the areas they cater to. National centres usually cater to local requirements of the nation; regional centres spread out to wider geographical areas; and

international centres encompass a host of financial services across the world. Different financial centres have followed different models to attain their present status of accomplishment. Most of the financial centres can broadly be categorised into two: International Financial Centres (IFCs) and Offshore Banking Units (OBUs).

Centres such as New York, London and Singapore demonstrate the full potential of an IFC, wherein offshore business is conducted alongside large domestic financial intermediation. In most cases offshore activities are not reinforced from domestic operations and they usually operate in the same regulatory and fiscal environment. Generally, IFCs have highly matured and developed economies. They are also endowed with sophisticated, deep and liquid domestic economies.

On the other hand, an OBU commonly refers to a smaller and less mature jurisdiction that attracts capital through a simple regulatory framework, minimum legal requirements for incorporation and operation, favourable tax treatment and stringent confidentiality requirements. It is, however, pertinent to mention that there is no set model followed by various IFCs and OBUs. Indeed, some models of development have been more successful than others.

Mumbai's USPs as Regional Financial Centre

There are numerous impressive parameters of Mumbai's financial sector:

First Mumbai accounts for a significant share in deposits mobilization (14 per cent of total deposits) and deployment of credit (21 per cent of total credit) of scheduled commercial banks.

Second, in terms of banking sector's transactions in clearance of cheques, Mumbai's share is as much as three-fourths of the total clearances.

Third, Mumbai's presence is overwhelming both in money market and the foreign exchange market transactions. Its share in the forex market is as high as four-fifths of the total turnover. Interestingly, while India is not a hub for foreign exchange (*a la* the Asian Dollar Market in Singapore), treasuries of banks dealing in foreign exchange have their headquarters in Mumbai.

Fourth, Mumbai, being a home to the National Stock Exchange and Bombay Stock Exchange, dominates the turnover and total market capitalization of the India stock markets. While the share of these two exchanges is about 92 per cent with respect to turnover, they collectively represent virtually the total market capitalization of India's corporate sector. Most derivatives and financial futures trading activity takes place in the stock exchanges in Mumbai.

Fifth, the presence of a large number of financial markets players such as foreign institutional investors (FIIs), term lending institutions, merchant bankers, broking houses and so on, makes Mumbai a favourable place for an IFC. Nearly 80 per cent of mutual funds are registered in Mumbai. Practically, all FII investments and over 90 per cent of merchant banking transactions happen in Mumbai.

Sixth, the headquarters of a large number of regulatory agencies including the Reserve Bank of India and Securities and Exchange Board of India are located in the city.

Seventh, Mumbai is truly an agglomeration of the right skills and the right framework for integrated delivery of financial services. The city has a large population of highly skilled English speaking employees and a reputation for attracting the best managerial talent. A significant number of MBAs, chartered accountants, legal advisers and research professionals are based in the city.

It has been estimated that by 2030, 41.4 percent of India's population will be living in urban areas, which would mean an additional population of 300 million people will be added to India's cities and towns, with the largest cities of Mumbai and Delhi having more than 30 million residents each by 2030. The India Infrastructure Report, 1996, estimated the annual investment need for urban water supply, sanitation and roads at about Rs. 280 billion (US \$ 6.67 billion, in 1996 prices) for the period 1995-2005. Another estimate made for the Ninth Five Year Plan had estimated the investment requirement for housing in urban areas at Rs. 526 billion (US\$ 12.5 billion). This implies a daunting task ahead of urban policy makers and urban infrastructure service providers in India. Mumbai, being the economic engine of the country, is crucially poised to potentially benefit from the ongoing process of India's integration with the global economy. Thus, apart from meeting the huge challenge that is emerging due to increase in services standards demanded by citizens, Mumbai would also simultaneously respond to emerging opportunities in the globalised world. The major features of such integration in the global economy would be :

1. The growing importance of international trade and investment.
2. The increasing global mobility of factors of production.
3. The driving force of technology.
4. The growing importance of knowledge-based industries.
5. The critical role of market size.
6. The need to adopt agile business practices.
7. The necessity of forging international strategic alliances.

To be successful as a city in this new milieu, it is essential to plan effectively, encompassing areas such as land use, infrastructure needs, realistic projection of cost, and implementation (Mohan, 2004). To develop the city of Mumbai, thus, concerted efforts in strategic planning, financing and implementation needs to be undertaken.

V: Concluding Remarks

Economic Renewal of Mumbai City is in the realm of possibility. It will require a concerted and co-ordinated effort of the Government, the Private Sector and its citizens to remove the obstacles to foster development and towards making Mumbai a nationally and internationally desirable destination for business and investment. This article outlines the basic ingredients of a plausible development strategy for the city of Mumbai. The article highlights four important and interdependent pillars of such a strategy. These include: providing world class physical infrastructure, improving social amenities, deepening financial markets, and strengthening institutions in new ways to compete and collaborate at the global level. The article also stresses that a proper strategy for urban renewal can pave the way for emergence of Mumbai as an international financial centre.

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