#### India and the Global Financial Crisis: Some Lessons and the Way Forward

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### **I. Introduction**

The United States and the world economy are grappling with a severe financial crisis. India has so far avoided a banking or financial crisis of the proportions witnessed in the United States and some other economies. However, there are definite indications of a recession in the Indian economy, especially in its industrial sector.

This paper examines the extent to which India is affected by the global crisis. In Section II, we discuss the major features of the global financial crisis and the impact of the crisis on India. Then, in Section III, we argue that the gradual nature of financial sector reforms in India has helped to limit the costs of the global crisis to the Indian economy. Policy changes in India are subject to intense scrutiny by a democratic political system. We point out that such scrutiny has proved beneficial in moderating the pace of financial liberalization, thereby, avoiding the dangers inherent in a high-speed reform package. Also noteworthy was the role of the Reserve Bank of India, which carefully bypassed a high-risk path to reforms.

In Section IV, we further argue that the industrial recession that looms large in India today has its origins in the nature of economic growth in the country from the 1990s. Despite its successes in raising overall incomes, that growth was unsuccessful in generating quality employment in adequately large numbers. This, in turn, has led to slow down in wage increases and poverty reduction, as well as slow growth of overall demand in the economy. The current economic crisis, which has slowed down global demand for Indian goods such as textiles, has aggravated this situation. Reviving the economy from its current state of recession requires not only liquidity enhancing measures, which the Reserve Bank of India has already started implementing, but also a major fiscal stimulus.

### II. The Global Financial Crisis and its Impact on India

It is well recognized that the origins of the current global financial crisis date back to the late 1990s. The tech bubble of those years precipitated a recession in the United States, and the US Federal Reserve responded by sharply cutting interest rates. Low interest rates and indiscriminate lending, especially in the sub-prime housing market, that began in the early 2000s sowed the seeds for the current crisis.

With interest rates going down, mortgage payments on housing loans became cheaper, and there was increased demand for new houses in the US. At the same time, banks and financial institutions introduced innovative financial instruments, which involved slicing-up and reselling the mortgage-backed securities and hedging them against any risks. And the lending in the sub-prime market continued, even as the quality of mortgages suffered, and default and delinquency rates began to rise in 2006.

The US financial system showed early signs of cracking up in June 2007 when two hedge funds owned by Bear Stearns, which were highly exposed to the sub-prime market, collapsed. In March 2006, the Fed averted a Bear Stearns bankruptcy as it oversaw its sale to JPMorgan Chase. In August 2008, it was the turn of Fannie Mae and Freddie Mac to fail, and the US Treasury took them over.

The true extent of the crisis, however, was not known until September, when Lehman Brothers, one of the enduring symbols of American capitalism from the 19<sup>th</sup> century, turned bankrupt. Merrill Lynch was in danger too, and it sold itself to the Bank of America. The insurance giant American International Group was on the verge of failure, but on September 16, the Fed announced a \$185 billion bail-out package for the group. In November, CitiBank was on the verge of collapse, and the US government propped it up by injecting \$20 billion.

The stock markets across the world panicked at these developments. The US government responded quickly to contain further damage. On September 18, the Treasury Secretary Henry M Paulson announced a \$700 billion bailout proposal to buy toxic assets from the nation's big banks. Even as a new administration is set to take over in Washington on January 20 and the President-elect Barack Obama has promised major economic stimuli and steps for job creation, the financial and economic crises appear to be far from over.

## The Impact of the Crisis on India

India can obviously take comfort in the fact that the global financial troubles have not, so far, triggered a major banking crisis in India, as they did in the UK and a number of other countries. Whereas banks in the UK and Europe were exposed heavily to the mortgage-backed securities offered by the US financial system, banks in India have avoided such exposure. As we shall explain in the following section, this has to do with the prudential regulation norms in place in India, and importantly to the gradual nature of reforms in the financial sector.

However, there are a number of worrying factors. First, there has been an outflow of foreign institutional investments (FIIs) from India starting in February 2008. India was a highly attractive location among emerging economies for foreign institutional investors seeking higher returns. With the onset of the financial crisis in the US and other western countries, major international portfolio investors are eschewing investment opportunities in emerging markets and withdrawing to safer havens, mainly in the US and Japan. Net inflow of portfolio investments into India between April 2007 and January 2008 was \$40billion. Such large inflows turned into net outflow of portfolio investments amounting to \$16 billion between February and September 2008 (see Figure 1).

The withdrawal of FII investments from India has created other problems in its wake. India's stock markets have witnessed a major collapse. Indian Rupee has been losing steadily against the US dollar since April 2008. Notably, the Indian Rupee was appreciating against the US dollar and other major currencies in 2007. The Rupee's value fell from Rs.39-40 to the dollar in January – April 2008 to more than Rs.50 as per the current market rates (see Figure 2).

India has been accumulating reserves in 2007. With the outflow of FIIs and depreciation of the Rupee, RBI tried to defend the Rupee by selling dollars. This has resulted in a depletion of foreign exchange reserves (see Figure 3).

The major concern in India today is that the global financial crisis is leading to a severe recession in the country's real economy. The signs of a recession are evident in the

Central Statistical Organization (CSO)'s estimates of growth of real GDP for the last quarter of 2007-08 and the first quarter of 2008-09. GDP growth for the first quarter of 2008-09 slowed down to 7.9%. The deceleration in growth of the industrial and especially manufacturing sectors is particularly marked: the manufacturing sector recorded growth rates of only 5.8% and 5.6% in the last two quarters. Production of electricity too suffered a sharp decline (see Table 1).

The slowdown in manufacturing and electricity sectors is well reflected in the growth rates of indices of industrial production given in Table. The index for manufacturing grew at 10.6% in April-August 2007-08 and at 5.2% in April-August 2008-09. The corresponding growth rates for the index for electricity production are 8.3% and 2.3% respectively (see Table 2).

Among use-based sectors, the slowdown has been most severe in the basic and intermediate goods. Capital goods grew at 9.2% in April-August 2008-09, slowing down from the 20.1% growth achieved during April-August 2007-08. However, consumer goods recorded faster rate of growth during April-August 2008-09 compared to the corresponding period in 2007-08. In fact, consumer durables posted a revival of growth in April-August 2008-09 from the negative rate of growth in 2007-08 (see Table 2).

Figure 1: Monthly Inflows of Portfolio Investment into India, in US\$billion, July 2006 to September 2008



Figure 2: Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee (Base year = 2006-07) (6-Currency Trade Based Weights)



Source: Reserve Bank of India

Figure 3: India's Total Foreign Exchange Reserves in Billions of US dollars, Weekly Data, April 2007-October 2008



Source: Reserve Bank of India

GDP at factor

prices

Table 1: Rates of Growth of Real GDP (at 1999-2000 prices) at Factor Cost, in per cent									
	2000- 01 to	2005-	2006-	2006- 2007- 07 08 Q1 Q2 Q3 Q4	2006- 2007-	2007-08			2008- 09
	2007- 08	06	07		Q1	Q2	Q3	Q4	Q1
Agriculture & allied activities	2.9	5.9	3.8	4.5	4.4	4.7	6.0	2.9	3.0
Industry	7.1	8.0	10.6	8.1	9.6	8.6	8.6	5.8	5.2
Mining & Quarrying	4.9	4.9	5.7	4.7	1.7	5.5	5.7	5.9	4.8
Manufacturing	7.8	9.0	12.0	8.8	10.9	9.2	9.6	5.8	5.6
Electricity, gas & water supply	4.8	4.7	6.0	6.3	7.9	6.9	4.8	5.6	2.6
Services	9.0	11.0	11.2	10.7	10.6	10.7	10.0	11.4	10.2

9.0

9.2

9.3

Source: Central Statistical Organization reported in RBI (2008).

9.4

7.3

9.6

7.9

8.8

8.8

Industry Group	2007-08	2007-08 April-August	2008-09 P April-August
Sectors			
Mining	5.1	4.9	4.1
Manufacturing	9.0	10.6	5.2
Electricity	6.3	8.3	2.3
Use-based classification			
Basic goods	7.0	9.9	3.8
Capital goods	18.0	20.1	9.2
Intermediate goods	8.9	9.9	0.7
Consumer goods	6.1	6.7	7.8
Consumer durables	-1.0	-2.3	5.6
Consumer non-durables	8.5	10.0	8.6
General	8.5	10.0	4.9

# Table 2: Growth of Indices of Industrial Production, Sectoral and Use-basedClassification of Industries

Source: Central Statistical Organization reported in RBI (2008).

## III. The Crisis and the Gradual Nature of Financial Sector Reforms in India

The financial crisis has not led to any major bank failures in India. This section examines certain features of financial sector reforms in India, in particular reforms related to capital account convertibility. It argues that the gradual nature of reforms in India may have helped in averting a banking failure.

The opening up of the economy to foreign trade and investment has been one of the main planks of the reform process in India beginning in 1991. There had been severe restrictions on foreign capital flows into the country, especially after the Foreign Exchange Regulation Act 1973. The Rupee became officially convertible on the current account in August 1994. The introduction of full capital account convertibility (CAC) -- "the freedom to convert local financial assets into foreign financial assets and *vice-versa* at market determined rates of exchange" -- was high on the agenda of India's policy makers. <sup>1</sup>

.....First of all, I believe that there's a lot of capital that goes out of India. If we have capital account convertibility, much of that will remain here, and there will be less need for balance of payments support from outside. Moreover, India's resources will be available to add to India's wealth. So that's the major reason [for considering full capital account convertibility].

Also, we live in a world where the distinction between the current account and the capital account is increasingly losing its relevance. It's necessary for India to dismantle the bulk of exchange controls. They're not effective anyway. The hawala market (the parallel foreign exchange market) has effectively integrated Indian capital markets with world capital markets. Freeing up the capital account would hopefully eliminate the evil of the hawala market.

Dr. Manmohan Singh, Finance Minister of India, Interview to *Business Times* (Singapore), November, 1993 (see Khanna, 1993).

#### Opening up of the Capital Account in India

The Reserve Bank of India (RBI) set up the First Tarapore Committee in 1997 to study the possibility of implementing full capital account convertibility in India. The Tarapore Committee recommended a number of macroeconomic targets -- fiscal deficit of 3.5% of the GDP, inflation rates of 3-5%, the non-performing assets (NPAs) of banks brought down to 5%, and Cash Reserve Ratio (CRR) reduced to 3% -- whose achievement was set as a pre-condition for implementing full capital account convertibility. The East Asian crisis of 1997 sharply brought into focus the problems of open capital account for developing countries, and, in the aftermath of the crisis, the progress towards full CAC slowed down in India.

<sup>&</sup>lt;sup>1</sup> This definition of capital account convertibility is given by Tarapore Committee (1997).

The achievement of full capital account convertibility was back in the agenda of reforms in India in recent years. Consolidation of banks, comfortable position in foreign exchange reserves, and growth in exports are factors that helped in renewing the interest in liberalizing the capital account. In 2006, the RBI set up the Second Tarapore Committee to look into the question of full capital account convertibility. Two other committees were asked to determine the future course of reforms in India's financial sector: the High-Powered Expert Committee (HPEC) on making Mumbai and International Financial Centre headed by Percy Mistry, and the Committee on Financial Sector Reforms under the chairmanship of Raghuram Rajan. These committees have recommended the implementation of full capital convertibility in India.

It may be noted that although India has not yet implemented full capital account convertibility, a number of liberalization measures over the years have led to a high degree of openness in the country's capital account. According to Nachane (2007), there has been a 'creeping movement' in the direction of capital account convertibility. Most of the recommendations made by the first committee on capital account convertibility appointed by the Indian Government in 1997 under the chairmanship of S.S. Tarapore have already been implemented. Tarapore Committee had recommended that Indian companies could make direct investments in foreign companies to the tune of \$50 million. Not only that this recommendation has been implemented, the upper limit for foreign investments by Indian companies was raised from \$50 million to \$100 million in 2001-02. Further, in 2002-03, Indian companies were allowed to invest abroad as much as 100 per cent of their net worth within the overall monetary ceiling of \$100 million. In 2003-04, the monetary ceiling of \$100 million was removed, and Indian companies are now allowed to make foreign investments up to 100 per cent of their net worth (Pradhan, 2007, pp.24-25). Restrictions on end use of ECBs for rupee expenditures are removed, and exporters are allowed to retain 100 per cent of forex earnings in foreign currency accounts (Nachane, 2007).

From the 1990s, there has been a significant increase in capital flows to India. Portfolio investments made by Foreign Institutional Investors (FIIs) have rapidly expanded in India in recent years. Portfolio finance flows to India was relatively stable during the period between 1992 and 2003, but increased sharply in the years after. Favourable

government policies triggered these flows. The limits for FII investments were progressively raised through the 1990s; by September 2001, the aggregate FII investment limit was raised to match the cap for foreign investment in the respective sectors. FII investments were exempted from long-term capital gains tax in the Union Budget for 2003-04 (Chandrasekhar and Pal, 2006).

The cumulative net inflow of portfolio investment into India between 1990-91 and 2002-03 was US\$ 24263. In the next three years, that is, between 2003-04 and 2005-06, the cumulative flow of portfolio investments was US \$33184. Portfolio investments exceeded 60 per cent of total foreign investment (sum of foreign portfolio and direct investments) in India between 2003-04 and 2005-06. Compared to FDI, portfolio investments are more volatile and subject to 'sudden reversals' as occurred during the East Asian Financial crisis.<sup>2</sup> Other important components of capital flows to India – External Commercial Borrowings (ECBs) and bank deposits by Non-resident Indians (NRIs) – are also highly short term in nature. In 2005-06, portfolio investments, ECBs and NRI deposits, all of which are short-term flows exhibiting high volatility, accounted for 67 per cent of total capital flows to India.

#### The Unfinished Reforms in the Capital Account

For all the above-discussed liberalization measures, there are still some restrictions on capital flows into India. There are regulations on short-term borrowing and lending abroad, and limits on the investment in debt instruments by the FIIs. Indian nationals are restricted from making investments abroad, while foreign nationals cannot invest directly in the Indian debt or equity market. There are also restrictions to accessing the forward exchange market (Panagariya, 2008, p. 207).

While the Indian government, and notably the Finance Ministry, was in favour of a quick transition to a full capital account convertibility regime, speed breakers came in from three directions. They are: (i) scholarly discussion highlighting the perils of full capital account liberalization, (ii) political pressure, especially from left political parties, and (iii) a cautious approach to reforms from the Reserve Bank of India.

 $<sup>^{2}</sup>$  On the volatility of portfolio flows, see the evidence given in Kohli (2001). See also Rao and Dutt (2006).

#### The Perils of Full Capital Account Liberalization

The deluge of capital flows has generated new pressures on India's economic growth. Economists have pointed to a number of vulnerabilities arising in the event of India opting for full capital account convertibility. An important basis for much of the concerns around a fully open capital account is the well-known trilemma in international economics. That is, a country cannot simultaneously pursue the following three policies: an open capital account, flexible exchange rate and an independent monetary policy.

With increases in capital flows, there is the possibility of appreciation of Indian Rupee, which in turn will reduce the competitiveness of India's exports. The Reserve Bank of India has taken a policy decision to allow the value of the Rupee to be determined by market forces; it will influence the value of the Rupee only by purchase and sale of foreign exchange. During periods of heavy inflows of foreign capital – 1993-95 and 1997-98, for instance – RBI has intervened in the market by purchasing dollars. This has resulted in a large accumulation of foreign exchange reserves. India's foreign exchange reserves increased from US\$4 billion in 1989-90 to US\$38.0 billion in 1999-00 and US\$151.6 billion in 2005-06.

Capital inflows and the accumulation of foreign exchange reserves have the effect of reducing the independence of monetary policy, especially with regard to the determination of interest rates. It was expected that the measures for financial sector liberalization would result in a reduction of interest rates in India, leading to a fall in the cost of capital and giving a positive impetus to investment and economic growth in the country. However, contrary to expectations, real interest rates have remained high in India (see Figure 4).

The inability to reduce interest rate is associated with the government's loss of autonomy in the determination of interest rates. Nachane (2005) points out that as the process of financial liberalization gathers momentum, the demand for bank deposits is determined by the 'spread' (between nominal interest rates on money and near money assets) rather than the level of nominal interest rates. Compared to the Central Bank, market forces have a greater say on the on the determination of spread. Also, with financial liberalization, the link between monetary and macroeconomic variables is weakened, leaving the monetary authorities with less scope for intervening in the real markets (Nachane, 2005). More importantly, in a period of liberalized capital flows, the lowering of interest rates on government securities will raise the possibility of major capital outflows from the country. According to the uncovered interest rate parity (UIP) formula,  $i = i^* + (\epsilon/e) + \rho$  implying that the domestic interest rate, i, is tied to the foreign rate, i\*, the expected growth rate of the nominal exchange rate,  $\epsilon/e$  (where  $\epsilon/e$ : expected depreciation,  $\epsilon$ , normalised by the current spot rate, e), and a risk premium,  $\rho$ . The equation suggests that for given i\*,  $\epsilon$ , and  $\rho$  in an open capital market, "the domestic interest rate, i, is unlikely to fall below the sum of the terms on the right-hand side, which can amount to tens of percentage points" (Taylor, 2006, p.4). The equation also indicate an inverse relation between e and i: as the exchange rate gains in strength, there will be pressures on the interest rate to go up (Taylor, 2006).

To offset the increase in liquidity following the accumulation of dollar reserves, the RBI sterilizes its intervention by open market sale of securities: by issuing interest bearing securities to the banks and the banks, in return, transferring currency (Rupee) to the RBI. This sterilization operation which increases the supply of interest bearing securities pushes interest rates upward (Subramanian, 2007).

Patnaik (2007) points out that government intervention in India to stabilize the exchange rate also had the effect of maintaining the boom in the stock markets. Foreigners will be encouraged to hold local currency assets as long as the returns on these assets exceed the sum of the returns on the foreign currency assets and the risk premium. As the demand for local currency (Rupee) assets builds up and the government intervenes to stabilize the exchange rate, foreign exchange reserves held by the RBI continue to rise. However, with the expansion of foreign exchange reserves, the Rupee strengthens and becomes less vulnerable to a currency collapse; consequently, the marginal risk premium associated with holding the Rupee falls, inducing further capital flows and further addition of foreign exchange reserves. The economy incurs a cost on account of stabilization operations of the Central Bank. This cost arises from the difference between the returns earned by foreign investors who bring in finance to the country and the returns to the RBI through holding the reserves (Patnaik, 2007).

Another fall out of the Reserve Bank of India policy of sterilizing the huge capital flows has been an increase in the domestic firms' borrowings in foreign currency. For the domestic firms, borrowing from abroad offers the twin advantages of lower interest rates abroad and protection from losses on account of Rupee depreciation (due to the RBI policy of holding the currency). In other words, sterilization of foreign capital inflows is in effect a "subsidy to domestic borrowers of foreign currency." But the increase in foreign currency liabilities of domestic firms presents another important problem. Any exchange rate devaluation will then have a much limited impact on the revival of domestic demand. While devaluation will positively affect demand by making exports cheaper, it will negatively affect the balance sheets of domestic firms as the firms' debt servicing in Rupee terms will significantly go up following devaluation (Subramanian, 2007).

# Figure 4: Average Annual Rates of Nominal Interest, Inflation and Real Interest in India, 1990-91 to 2002-03, in per cent



*Notes:* Inflation rate at 1993-94 prices *Source:* Rakshit (2003) based on Reserve Bank of India Handbook

While the academic discussion pointed to the many dangers in a quick transition to a fully liberalized capital account, there was also political pressure on the Congress-led United Progressive Alliance (UPA) government to go slow on the reform measures. The Reserve Bank of India too adopted a cautious approach in liberalizing capital flows into India. This policy stance of the Central Bank is evident in the opinion expressed by its Governor (Dr. Y. V. Reddy) that '---there is merit in presuming that the [capital] flows are temporary till there is a reason to judge them to be permanent' (Reddy, 2005). He further adds:

.....In brief, given the adverse international experience with unfettered capital account liberalization, we have been risk averse and have adopted a policy of active management of the capital account. ....Since non-debt creating flows are dominating, the emphasis [in India] is on encouraging inflows through foreign direct investment, and enhancing the quality of portfolio flows by strict adherence to what may be described as 'Know Your Investor' principle.....Further, prudential regulations over financial intermediaries, especially over banks, in respect of their foreign exchange exposures and transactions are a dynamic component of management of capital account as well as financial supervision.

---Dr. Y. V. Reddy, Governor, Reserve Bank of India, Lecture given in June 2005 (see Reddy, 2005).

To summarize: Although the proposal for capital account liberalization was mooted in India in the early 1990s itself, the country has not yet embraced full liberalization. As the events unfold during the current crisis, it is clear that India's financial system has done itself a favour by avoiding too high an exposure to international capital markets. At the same time, there is already high degree of openness in India's capital account, and this has created vulnerabilities in the country's real economy. We turn to these issues in the next section.

#### IV. The Way Forward: The Need for a Revival of Domestic Demand

To understand the ongoing industrial recession in India, it is important to review certain aspects of industrial growth in India during the 1990s and 2000s. To begin with, the annual rate of growth of manufacturing incomes in India is seen to have declined in the period 1991-92 to 2004-05 compared to the period 1980-81 to 1990-91 (see Table 3). If we consider manufacturing sector growth in the whole period after 1991-92, a clearer picture emerges (see Figure 5). Growth over the previous year of manufacturing sector in India was negative in 1991-92 and only 4.1 per cent in 1992-93. Year-on-year growth of manufacturing sector rose to very high levels in the next three years, peaking at 14.9 per cent in 1995-96. These were also the initial years of liberalization in India. However, India's manufacturing sector entered a period of relative stagnation in growth in the period between 1996-97 and 2001-02. Growth of manufacturing sector appears to have climbed to higher levels again after 2002-03 (see Figure 5).

Secondly, industrial growth in the post-1980 period has had a poor record in employment generation. Only 484,000 jobs were generated in India's registered factory sector in the 1980s -- the decade of "jobless growth" in Indian industry (Thomas, 2002). Several explanations have been offered for the adoption of capital-intensive production techniques in the 1980s. They include the introduction of job security regulations in the late 1970s, the increase in real wages in the 1980s, and the intensive use of the "overhang" of employment that existed in the 1970s (Fallon and Lucas, 1993; Ahluwalia, 1991; Ghose, 1994; Nagaraj 1994). Compared to the 1980s, manufacturing growth in the early part of the 1990s was more employment generating (Thomas, 2002). However, there is clear evidence of a decline in manufacturing employment in India in recent years (see Table 4 and Figure 6). Factory sector employment in India was 10.1 million in 1997-98 but it declined to 7.9 million in 2003-04. Correspondingly, employment in India's organized sector (of which factory sector is a component) declined from 28.2 million in 1997-98 to 26.5 million in 2003-04 (Table 4).

The above discussion on employment trends has been limited to organized sector employment, particularly employment in the factory sector (consisting of establishments employing 10 or more workers). It may be noted here that, in India in 2003-04, only 7.9 million worked in the factory sector and 26.5 million in the organized sector as a whole. However, in 2004-05, India's total workforce numbered 457.9 million, of which 258.7 million were employed in agriculture and allied activities. Employment in the manufacturing sector (organized and unorganized) was 55.9 million in 2004-05 (Sundaram, 2007, p.3127). Clearly, factory sector and organized sector employees account for a small share of India's total work force. What has been the Indian experience in the 1990s and 2000s in regard to overall employment generation?

Estimates based on data from National Sample Survey (NSS) indicate that the generation of non-agricultural employment was relatively fast in the 1980s (although growth of factory sector employment was slow in this decade). Compared to the 1980s, growth of agricultural and non-agricultural employment slowed down in the 1990s. The 1980s were a period in which the growth of agricultural and non-agricultural wages

showed a significant turn around. This decade also witnessed considerable reduction in poverty. Compared to the 1980s, growth of wage rates and reduction of poverty proceeded at a slower rate in the 1990s.

NSS estimates of employment for the years 1999-00 and 2004-05 show that there was a revival of growth of employment during this period. Sundaram (2008) also points out that the size of the organized sector workforce in India as measured by the unit record data from NSS is higher than the widely-used estimates from Directorate General of Employment and Training. At the same time, however, studies have shown that the increase in employment was largely in low value-adding jobs. Even within the organized sector workforce, 33 to 57 per cent did not enjoy adequate social security protection, and they could be labelled as informal workers (Sundaram, 2008). Sundaram (2007) estimates that between 1999-00 and 2004-05, labour productivity declined in most sectors of the economy, and growth of real wages slowed down in rural India and actually declined in urban India. According to Sundaram (2008), the period 1999-00 and 2004-05 was also one in which the pace of poverty reduction clearly slowed down in urban India. This general picture about employment generation, labour productivity growth, real wages growth, and poverty reduction in the 1990s and 2000s provides a backdrop for understanding the demand-side factors underlying India's recent industrial growth.

We also have some evidence on the growth performance of India's unorganized sector manufacturing. A plot of incomes from registered and unregistered sectors over the period from 1950-51 to 2002-03 clearly indicate a growing divergence in growth of incomes from the registered and unregistered sectors. The unregistered sector consisting small-scale enterprises are lagging behind in growth especially after the 1980s. Further, we have evidence from various reports of National Sample Survey Organization (NSSO) for three time-points: 1994-95, 2000-01 and 2005-06. Table 5 shows that the growth in the number of unregistered enterprises and unregistered sector workers was rather fast between 1994-95 and 2000-01, which was also the early phase of economic reforms in India. However, during the period between 2000-01 and 2005-06, growth of unregistered sector enterprises and workers slowed down considerably. The annual compound rate of growth of unregistered sector workers was negative during this period (see Table 5)

··· ·· ·· · · · · · · · · · ·				
	Agriculture	Manufacturin g	Services & construction	GDP
1950-51 to 1959-60	2.8	6.2	4.4	3.7
1960-61 to 1969-70	1.5	4.8	4.9	3.2
1970-71 to 1979-80	1.7	4.9	4.4	3.4
1980-81 to 1990-91	3.2	7.5	6.6	5.5
1991-92 to 2004-05	2.5	6.7	7.9	6.1

Table 3: Average Annual Rates of Growth of Major Sectors of Indian Economy, 1950-51to 2004-05, in per cent

Notes: Rates of growth are calculated by semilogarithmic regression.

All growth rates are statistically significant at less than 5 per cent level.

*Source*: Calculations based on *National Accounts Statistics* published by Central Statistical Organization (CSO), available from *Economic and Political Weekly* Research Foundation (EPWRF) and

<<u>http://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Handbook%20of%20Statist</u> ics%20on%20Indian%20Economy>

numbers in minons		
	Factory Sector	Organized Sector
1960	3.8	
1970	5.0	17.8
1981-82	7.9	23.8
1991-92	8.3	27.1
1997-98	10.1	28.2
2003-04	7.9	26.5

 Table 4: Employment in India's Factory Sector and Organized Sector, various years, numbers in millions

*Sources:* Annual Survey of Industries, various issues, *Handbook of Statistics on Indian Economy*, Reserve Bank of India, from < <u>www.rbi.org.in</u>> Figure 5: Rates of Growth over the Previous Year of India's Total GDP and Manufacturing GDP at Factor Cost (at Constant 1999-00 Prices), 1991-92 to 2006-07



*Notes:* GDP is Gross Domestic Product. The figures for 2005-06 and 2006-07 are based on quick estimates and revised estimates respectively.

Source: *National Accounts Statistics* published by Central Statistical Organization (CSO), available from Reserve Bank of India website.



Figure 6: Employment in India's Factory Sector, 1981-82 to 2003-04, numbers in millions

Source: Annual Survey of Industries, various issues.

Table 5: Compound Annual Rate of Growth of Enterprises and Workers, Unorganized ManufacturingSector in India, in %

	Rural	Urban	Total				
Estimated Number of Enterprises							
1994-95 to 2000-01	2.16	4.07	2.71				
2000-01 to 2005-06	0.32	-0.58	0.05				
Estimated Number of Workers							
1994-95 to 2000-01	1.35	2.83	1.86				
2000-01 to 2005-06	-0.44	-0.17	-0.35				

*Source*: National Sample Survey (NSS) Report No. 524, 62nd Round (2005-06), Statement 5, p.24.

#### Credit Policy Reforms and Industrial Growth

How has the monetary policy fared with respect to increasing credit availability in the Indian economy, particularly for the industrial sector? After all, the key objective of the monetary-fiscal reform package in India introduced in the 1990s was to restrict the flow of bank's funds to the Government by *fiat* and thereby free a larger volume of resources for credit creation. However, the Indian experience, so far, with respect to increasing credit creation in the economy has not been very encouraging.

First, RBI (2003) points out that the "simultaneity of the processes of money and credit creation" was weakened in India during the 1990s. As the share of foreign assets of the banking sector in M<sub>3</sub> rose, the share of domestic credit in M<sub>3</sub> correspondingly declined: from 115.7 per cent in 1989-90 to 89.6 per cent in 2001-02 (RBI, 2003, p. V-14). More importantly, even after the monetary-fiscal reforms, net bank credit to the Government as a proportion of total domestic credit did not decline in the 1990s compared to the 1980s and 1970s. Although the net Reserve Bank support to the Government declined, investments by the banking system in government securities showed an upward trend. Therefore, even as Statutory Liquidity Ratio (SLR) was brought down to 25 per cent, scheduled commercial banks' investments in government securities increased from 25.3 per cent of deposits as in March 1990 to 37.3 per cent of deposits in March 2002 - that is, almost 12 percentage points above the statutory requirements (RBI, 2003, p. V-14). At the same time, credit disbursed by scheduled commercial banks showed a deceleration in growth during the years between 1996-97 and 2001-02 (growing at 15.1 per cent compared to 19.5 per cent during the years between 1992-93 to 1995-96) (RBI, 2006, p.130).

Several factors originating from demand and supply side have been attributed to the slowdown in bank credit in the second half of the 1990s. On the supply side, banks have been highly risk averse in regard to expanding their loan portfolio. The introduction of prudential norms in the mid-1990s, which revealed relatively high level of nonperforming assets (NPAs) with banks, and the revised requirements of capital adequacy ratio (8.7 per cent at end-March 1996) were factors that limited bank's ability to lend (RBI, 2006, p.130). Given the constraints they faced, banks found that government securities, which offer risk-adjusted returns, are an attractive option for investments. Consequently, banks' investments in government securities continued to rise even after the withdrawal of SLR requirements. At the same time, there were many demand-side factors too that constrained credit expansion of banks. During the latter part of the 1990s, India's corporate sector was facing intense competitive pressures and, as a consequence, focussed its energies on restructuring rather than expansion of existing capacities. As part of their restructuring plans, Indian firms began to meet their financing needs increasingly through retained earnings and less through borrowings. Improvements in corporate profitability during this period also aided this trend. Debt-equity ratio of the corporate sector declined from an average of 85.5 per cent during the period from 1990-91 to 1994-95 to 65.2 per cent during the period from 1995-96 to 1999-2000 (RBI, 2006, p.130). Another reason for the slow growth of credit demand was the rise in real interest rates. Despite the reduction in cash reserve ratio (CRR), bank rate and reverse repo rate as part of an accommodative monetary policy pursued by the RBI, nominal interest rates in India refused to climb down. This, along with the falling inflation rate resulted in rising real interest rates. Industrial slowdown during the period from 1996-97 to 2001-02 was another reason for the reduced demand for bank credit during this period (RBI, 2006, p.130).

India's corporate firms now have improved access to the domestic and international capital markets, and this is yet another factor behind the slow growth of demand for bank credit. Indian companies have raised large capital through the issue of commercial paper, external commercial borrowings (ECBs), global depository receipts (GDRs) and American depository receipts (ADRs) (see Table 6).

As Table 7 shows, credit channelled to the industrial sector was at a slower pace during the 1990s and through the period 2000-01 to 2004-05 compared to the 1980s. As a proportion of total outstanding credit, credit extended to the industrial sector fell down considerably, from 48.7 per cent as in March 1990 to 38.8 per cent in March 2005. There was a similar decline in agriculture's share in total outstanding credit (see Table 8). It is important to note that while the shares of agriculture and industrial sectors in total bank credit in India declined between 1990 and 2005, the corresponding share of personal loans and professional services showed an increase, from 9.4 per cent to 27 per cent. Especially noteworthy is the fast growth of housing loans during this period, whose share in total credit rose from 2.4 per cent in March 1990 to 11 per cent in March 2005 (see Table 8).

There was a significant drop in credit channelled to the priority sectors. As a proportion of non-food gross bank credit, priority sector advances declined from 40.1 per cent in March 1990 to 36.3 per cent in March 2006 (see Table 9; see also Tables 10

and 11). Within the priority sector advances, the share of agriculture fell from 40.9 per cent in March 1990 to 33.8 per cent in March 2006 (RBI, 2006, p.134). Going by various indicators, it is clear that credit flow to the small scale industry (SSI) sector has clearly decelerated in recent years. Average annual growth of advances to the SSI sector slowed down from 13.6 per cent during the 1990s to 9.5 per cent during 2001-06. The share of the SSI sector in total priority sector advances fell from 44 per cent in March 1998 to 18 per cent in March 2006. The proportion of SSI credit in net bank credit (NBC) was 15.7 per cent in March 1990 but declined to 8.6 per cent in March 2004 (RBI, 2006, p.139).

Year	Capital Issues	ADR/GDR Issues	External Commercial Borrowings	Issue of CPs	Financial Assistance by FIs (net)	Retained earnings	Depreciation Provision
1997-98	2,171		14,028	854		6,873	11,312
1998-99	2,484		-2,504	3,270		4,517	12,944
1999-00	2,350	2,144	2,993	893		4,678	14,710
2000-01	2,505	3,433	-3,182	183	9,084	5,186	15,759
2001-02	1,951	1,528	-11,308	1,378	-3,469	2,584	17,451
2002-03	642	3,426	-3,593	-1,475	-5,672	8,288	18,306
2003-04	2,422	3,098	16,098	3,382	2,723	15,645	20,408
2004-05	10,456	2,960	41,106	5,104	7,885	28,384	22,697
2005-06	13,781	7,262	45,078	-1,517	8,687	48,402	28,883

Table 6: Non-Bank Sources of	f Funds t	for Industr	v in India.	1997-98 to	2005-06.	in Rupees Crow	res
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Notes: 1 crore is 10 million.

ADR is American Depository Receipts; GDR is Global Depository Receipts; CP is Commercial Paper; and FIs are Financial Institutions. *Source:* Reserve Bank of India (2006), p. 137.

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Sectors	1980-81 to 1989-90	1990-91 to 1999-00	2000-01 to 2004- 05					
Agriculture	18.1	10.6	22.2					
Industry	17.4	15.4	15.9					
Transport operators	13.6	9.4	11.2					
Professional services	20.7	16.8	30.4					
Personal loans	25.3	22.7	37.7					
Trade	11.8	17.3	12.6					
Finance	29.2	25.6	27.4					
Total bank credit	17.2	16.0	20.2					

Table 7: Compound Annual Growth Rate of Credit Disbursed by Commercial Banks in India, by Sectors, 1980-81 to 2004-05, in per cent

Source: Basic Statistical Returns of Scheduled Commercial Banks in India, various issues, Reserve Bank of India cited in Reserve Bank of India (2006), p.131.

	End-March							
	1990	1995	2000	2002	2003	2004	2005	
Agriculture	15.9	11.8	9.9	9.8	10.0	10.9	10.8	
Industry	48.7	45.6	46.5	41.4	41.0	38.0	38.8	
Transport	3.2	1.9	1.8	1.4	1.2	1.3	1.2	
Personal loans and professional services <i>Of which</i>	9.4	11.3	14.4	16.8	19.6	25.3	27.0	
Loans for purchase of consumer durables	0.4	0.3	0.6	0.5	0.4	0.5	0.6	
Loans for housing	2.4	2.8	4.0	5.0	6.5	9.7	11.0	
Trade	13.9	17.1	15.6	15.4	13.8	11.5	11.2	
Financial institutions	2.1	3.8	4.8	5.7	6.7	6.7	6.4	

Table 8: Distribution of Outstanding Credit of Scheduled Commercial Banks in India bySectors, as per cent of Total Outstanding Credit, 1990 to 2005

Miscellaneous	6.8	8.5	7.1	9.5	7.7	6.2	4.6
Total credit	100	100	100	100	100	100	100

*Source:* Basic Statistical Returns of Scheduled Commercial Banks in India, various issues, Reserve Bank of India cited in Reserve Bank of India (2006), p.132

Table 9: Outstanding Priority Sector Advances as Proportions of Non-Food Gross BankCredit, End-March 1990 to End-March 2006, Proportions in per cent

Ji cuit, Eli	a maren 1000 to Ema	11 di eli 2000, i i opoi diolis i	in per ceine
Year	All priority sector	Agriculture advances	SSI advances
	advances		
1990	40.1	16.4	15.4
1991	37.8	14.8	15.1
1992	37.4	15.0	15.0
1993	35.5	14.2	14.3
1994	36.9	14.5	15.5
1995	34.7	13.0	15.0
1996	33.0	12.2	14.4
1997	33.8	12.5	14.3
1998	34.6	12.1	15.1
1999	35.2	12.2	14.9
2000	35.1	11.8	14.1
2001	36.0	12.1	13.0
2002	36.3	12.6	11.8
2003	34.1	11.9	9.7
2004	36.2	12.4	9.0
2005	38.2	12.5	7.5
2006	36.3	12.3	6.4

*Notes:* SSI is Small-scale industry.

*Source: Handbook of Statistics on Indian Economy, 2005-06*, Reserve Bank of India, cited in Reserve Bank of India (2006), p.134.

Year	OAME	NDME	DME	All
2000-01	48.9	52.9	48.1	49.2
2005-06	41.3	49.6	37.9	42.0

 Table 10: Percentage of Unorganized Manufacturing Enterprises Reporting Shortage of Capital as a

 Problem for Growth

*Notes:* OAME: Own account manufacturing enterprises: enterprises with no hired worker on a fairly regular basis; NDME: Non directory manufacturing establishments: with at least one hired worker and less than six total workers; DME: directory manufacturing establishments: with at least one hired worker and six or more total workers.

*Source:* NSS (National Sample Survey) Report N0.524 Statement 11, p.30; NSS Report No. 478 Statement 20, p. 26

	OAME	NDME	DME	All
% of enterprises not receiving any financial assistance	94.6	81.3	70.1	92.2
% of enterprises receiving loans from institutional sources	1.9	11.1	21.3	3.6

 Table 11: Unorganized Manufacturing Enterprises by Financial Assistance Received

*Notes:* See Table 10 above.

Source: NSS (National Sample Survey) Report 524 Statement 14, p.32

The Impact of Liberalized Capital Flows on the Real Economy

What has been the impact of liberalized capital flows on the real sectors of the economy in India?

Patnaik (2003) explained the possibility of deindustrialization – unemployment of hitherto employed industrial workers – as a consequence of sudden inflows of speculative foreign capital leading to exchange rate appreciation, and consequently, cheapening of foreign goods relative to domestic goods. Patnaik (2003) points out that the bulk of capital flows are in the nature of capital-as-finance, not as capital-inproduction; the Central Bank holds these capital inflows as reserves. There are many factors that prevent the use of foreign exchange reserves for investment purposes. To begin with, private investment in India has been demand-constrained rather than finance-constrained. This explains the rather unusual phenomenon in the late 1990s of stagnation in gross fixed capital formation in the private sector as a share of gross domestic product even when forex reserves were piling up. There are problems arising from the use of capital flows which are 'short term' in nature for financing investments which are 'long-term' in nature. Problems also arise as a result of borrowing in foreign exchange for investing in projects which do not earn foreign exchange (Patnaik, 2003).

Capital inflows and reserve accumulation has imposed limitations on pursuing expansionary fiscal policies (Rakshit, 2003). During the period 1999-2003, the average annual growth of reserve money, which indicates increases in Central Bank credit through its ability to generate high power money, was relatively low at 9.2 per cent. During this period of time, Reserve Bank of India's credit to the government and to the commercial sector as proportions of reserve money stock (outstanding) declined significantly: from 49.8 per cent to 32.6 per cent in the case of credit to the government and from 5.4 per cent to 0.83 per cent in the case of credit to the commercial sector. Correspondingly, RBI's net foreign exchange reserves assets rose from 59.1 per cent to 91.1 per cent during this period of time (see Figure 7). Such slowdowns in net RBI credit to the government have a negative effect not only with respect to aggregate demand generation but also on the generation of seignorage revenue for the government (Rakshit, 2003).

According to Rakshit (2003), India is a demand deficient economy, and in a demand deficient economy, capital flows will result in a reduction in current output, investment and consequently future production potential. In addition to the costs on account of servicing the capital receipts, capital flows leads to appreciation of currency and widens the trade deficits and output gap. When Indian companies raise money abroad for domestic investments or when State governments receive loans from international agencies such as the World Bank, it has the effect of capital inflows to a demand deficient economy, and therefore such inflows will retard growth (Rakshit, 2003).

Figure 7: Reserve Bank of India's Credit to Government and the Commercial Sector and its Holdings of Foreign Exchange Assets, Proportions in per cent, 1990-91 to 2002-03, in per cent



Source: Rakshit (2003) based on Reserve Bank of India Handbook

#### The Need for Fiscal Measures to stem the Tide of Recession

After the financial crisis began in September 2008, the Reserve Bank of India has announced a number of measures to improve liquidity in the Indian economy. These measures include the reduction in repo rate under the liquidity adjustment facility (LAF) from 9.0 per cent to 7.5 per cent, reduction in cash reserve ratio from 9.0 per cent to 5.5 per cent of net demand and time liabilities (NDTL), and reduction in statutory liquidity ratio (SLR) from 25 per cent to 24 per cent of NDTL. The Reserve Bank has also announced steps that would increase liquidity in the forex market. It will continue to sell foreign exchange (US dollars) through agent banks or intervene directly to meet any demand-supply (of foreign exchange) gaps. To attract deposits from non-resident Indians, the RBI has raised interest rate ceilings on FCNR (B) and NR(E)RA term deposits by 100 basis points each. Further, domestic firms or individuals are permitted to resort to external commercial borrowings (ECBs) up to US \$ 500 million per borrower per financial year for rupee expenditure and/or foreign currency expenditure under the automatic route. <sup>3</sup>

However, the above-discussed measures to improve liquidity do not seem to have the desired effect in stimulating the economy. Banks' lending to industry does not seem to have increased much. RBI data released in November 2008 indicate that banks show a preference for investing in government securities rather than lending to industry. In the week beginning on November 17, 2008, banks have invested considerably large funds in reverse repo auctions of the Reserve Bank of India, an avenue for parking their temporary surpluses.<sup>4</sup>

Meanwhile, several export-oriented industries such as textiles have been hit by the recession and the subsequent slowdown in demand in the United States. For instance, for textile and garment exporters in India, drop in demand from the US in this winter season is estimated to be of the order of 25 per cent. Many export-oriented industries including auto, pharma and textiles are facing the risk of defaults or delayed payments by firms that have turned bankrupt in the US.

Other leading economies of the world are responding to the financial crisis with major fiscal stimuli. China is facing economic problems as export demand from the US, the main importer of Chinese goods, has taken a hit. To keep its economy growing despite the fall in the US demand, the Chinese government has proposed a \$600 billion stimulus package. China is investing in steel, cement and construction to revive domestic demand. To complement such a large fiscal stimulus package, the Chinese central bank has loosened up monetary policy as well. On November 26, it cut interest rates by 1.08 percentage points, its largest rate reduction since the Asian financial crisis a decade ago; this rate reduction is also the fourth such benchmark rate cutting undertaken by the Chinese Central Bank since September 16.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> See <<u>http://rbi.org.in/scripts/BS\_PressReleaseDisplay.aspx?prid=19468</u>>

<sup>&</sup>lt;sup>4</sup> See the report 'Banks prefer G-Secs, parking with RBI to corporate lending', *Business Line*, November 22, 2008.

<sup>&</sup>lt;sup>5</sup> <u>http://www.nytimes.com/2008/11/27/business/worldbusiness/27yuan.html?hp</u>

The European Commission has also, on November 26, proposed a stimulus package totaling 200 billion euros, or \$256.22 billion, which amounts to 1.5 percent of the European Union's gross domestic product. This package would be financed by increased spending undertaken by member-governments.<sup>6</sup> In the US, President-elect Barack Obama has promised a major stimulus package to "jolt [the] economy back into shape," and this package is expected to cost between \$700 billion and \$1 trillion.<sup>7</sup>

The current economic situation in India justifies a major fiscal intervention by the government -- on the lines of the economic packages announced by the US, European Commission and China. India's industrial sector suffers from the depressed demand conditions in its export markets, as well as from suppressed domestic demand due to the slow generation of employment during the past two decades. Given such a scenario, there is huge scope for public investments, especially in the infrastructure sector, to revive the economy. Electricity production, a sector which has been recording very slow growth over the past several months, can be one of the priority areas for new investments.

### **Reference:**

- Athukorala, P and Sen, K. (2002), *Saving, Investment and Growth in India*, Oxford University Press, New Delhi.
- Chandrasekhar, C. P. (1988), 'Aspects of Growth and Structural Change in Indian Industry', *Economic and Political Weekly*, Vol.23, Nos.45-47, Special Number, November, pp.2359-2370, reprinted in Nayyar (1994).
- Chandrasekhar, C.P. and Ghosh, Jayati (2004), *The Market That Failed: Neoliberal Economic Reforms in India*, LeftWord Books, New Delhi.
- Chandrasekhar, C.P. and Pal, Parthapratim (2006), 'Financial Liberalization in India: An Assessment of its Nature and Outcomes', *Economic and Political Weekly*, March 18, pp.975-85.
- EPW Research Foundation (EPWRF) (2004): 'Finances of State Governments: Deteriorating Fiscal Management', *Economic and Political Weekly*, 1 May, pp. 1841-57.
- Fallon, P. and Lucas, R. E. B. (1993), 'Job Security Regulations and the Dynamic Demand for Industrial Labour in India and Zimbabwe', *Journal of Development Economics*, Vol.40, pp.241-275.
- Ghose, A. K. (1994), 'Employment in Organized Manufacturing in India', *Indian Journal of Labour Economics*, Vol.37, No.2, April-June, pp.141-162.

<sup>&</sup>lt;sup>6</sup> See <<u>http://www.nytimes.com/2008/11/27/business/worldbusiness/27euro.html?hp</u>> <sup>7</sup> See <<u>http://www.guardian.co.uk/world/2008/nov/25/barack-obama-recession-credit-</u> crunch>

- Goldar, Bishwanath (2000), 'Employment Growth in Organized Manufacturing in India', *Economic and Political Weekly*, Vol.35, No.14, pp. 1191-95.
- Joshi, Vijay and Little, I.M.D. (1996), *India's Economic Reforms: 1991-2001*, Oxford University Press, New Delhi.

Khanna, Vikram (1993), 'India's economic mandarin speaks: Interview with Dr

Manmohan Singh, Finance Minister of India', *Business Times*, November 24, 1993.

- Kohli, Renu (2001a), 'Capital Account Liberalisation: Empirical Evidence and Policy Issues I", *Economic and Political Weekly*, April 14, 2001.
- Kohli, Renu (2001b), 'Capital Account Liberalisation: Empirical Evidence and Policy Issues II', *Economic and Political Weekly*, April 21, 2001, 1345-48.
- Nachane, D. M. (2005), 'Some Reflections on Monetary Policy in the Leaden Age', *Economic and Political Weekly*, July 9.
- Nachane, D.M. (2007), 'Liberalization of the Capital Account: Perils and Possible Safeguards', *Economic and Political Weekly*, September 8.
- Nagaraj, R. (1994), 'Employment and Wages in Manufacturing Industries Trends, Hypothesis and Evidence' *Economic and Political Weekly*, Vol.29, No.4, 22 January, pp.177-86.
- Nagaraj, R. (1997), 'What Has Happened since 1991? Assessment of India's Economic Reforms', *Economic and Political Weekly*, November 8, 2869-79.
- Nagaraj, R. (2000), 'Organized Manufacturing Employment', *Economic and Political Weekly*, Vol.35, No.38, 16 September, pp.3445-3448.
- Nayyar Deepak ed (1994), Industrial Growth and Stagnation- The Debate in India, Oxford University Press, Delhi.
- Ocampo, José Antonio and Jomo, K. S. (eds.) (2007), *Towards Full and Decent Employment*, Zed Books Limited, London and New York.
- Panagariya, Arvind (2008), *India: The Emerging Giant*, Oxford University Press, new York.
- Patnaik, Prabhat (2003), 'On the Economics of "Open Economy" De-industrialization', V.V. Giri Memorial Lecture at the Annual Conference of the Indian Society of Labour Economics, Kolkata, December 2003, downloaded from <u>www.macroscan.org/anl/nov03/anl251103Open Economy.htm</u> on 7 February, 2004.
- Patnaik, Prabhat (2007), 'Financial Crises, Reserve Accumulation and Capital Flows', *Economic and Political Weekly*, 15 December, pp. 45-51.
- Pradhan, Basanta K., Saluja, M.R., Roy, P.K., and Shetty, S.L. (2003), *Household Savings and Investment Behaviour in India*, Economic and Political Weekly Research Foundation, Mumbai.
- Pradhan, Jaya Prakash (2007), 'Growth of Indian Multinationals in the World Economy: Implications for Development', Working Paper No. 2007/04, March 2007, Institute for Studies in Industrial Development, New Delhi.
- Rakshit, Mihir (2003), 'External Capital Flows and Foreign Exchange Reserves: Some Macroeconomic Implications and Policy Issues', *Money and Finance*, April-September, pp. 63-95.
- Rao, J. Mohan and Dutt, Amitava K. (2006), 'A Decade of Reforms: The Indian Economy in the 1990s,' forthcoming in a volume edited by Lance Taylor, Oxford University Press.

RBI (2008), Macroeconomic and Monetary Developments: Mid-Term Review 2008-

09, Reserve Bank of India, Mumbai.

Reddy, Y. V. (2005), 'Overcoming Challenges in a Globalising Economy: Managing India's External Sector', Lecture by Dr. Y. V. Reddy, Governor, Reserve Bank of India at the India Programme of the Foreign Policy Centre, London, on June 23, 2005.

- Reserve Bank of India (2003), *Report on Currency and Finance 2001-02*, Reserve Bank of India, Mumbai.
- Reserve Bank of India (2006), *Report on Currency and Finance 2005-06*, Reserve Bank of India, Mumbai.
- Sen, Kunal (2007), 'Why did the Elephant Start to Trot? India's Growth Acceleration Reexamined', *Economic and Political Weekly*, October 27.
- Singh, Ajit (1998), 'Liberalization, the Stock Market, and the Market for Corporate Control: A Bridge too far for the Indian Economy?' in I. J. Ahluwalia and I. M. D. Little (eds.) (1998), *India's Economic Reforms and Development: Essays for Manmohan Singh*, Oxford University Press, New Delhi.
- Subramanian, Arvind (2007), 'Capital Account Convertibility: A Neglected Consideration, *Economic and Political Weekly*, 23 June, pp. 2413-8.
- Sundaram, K. (2007), 'Employment and Poverty in India, 2000-05', *Economic and Political Weekly*, July 28.
- Taylor, Lance (2006), 'External Liberalization in Asia, Post-Socialist Europe, and Brazil' in Taylor (ed.) (2006).
- Taylor, Lance (ed.) (2006), External Liberalization in Asia, Post-Socialist Europe, and Brazil, Oxford University Press, Oxford and New York.
- Thomas, Jayan Jose (2002), 'A Review of Indian Manufacturing', in Parikh, Kirit, and Radhakrishna, R (eds.) (2002), *India Development Report 2002*, Oxford University Press, New Delhi.
- Thomas, Jayan Jose (2008), 'India's Rise in the New Economy: Implications for Labour', forthcoming.
- UNCTAD (2004), 'India's Outward FDI: A Giant Awakening', UNCTAD/DITE/IIAB/2004/1, 20 October 2004.
- UNCTAD (2007a), *World Investment Report 2007: Transnational Corporations, Extractive Industries and Development*, United Nations, New York and Geneva.
- UNCTAD (2007b), *World Investment Prospects Survey 2007-2009*, United Nations, New York and Geneva.
- van der Hoeven, Rolph and Lübker, Malte (2007), 'Financial Openness and Employment: The Need for Coherent International and National Policies' in Ocampo and Jomo (eds.) (2007).