

The costs of ‘coupling’: the global crisis and the Indian economy

Jayati Ghosh and C. P. Chandrasekhar*

The view that the Indian economy would be less adversely affected by the global economic crisis because of limited integration and other inherent strengths has proved to be wrong. The economic boom in India that preceded the current downturn was dependent upon greater global integration in three ways: greater reliance on exports particularly of services; increased dependence on capital inflows, especially of the short-term variety; and the role these played in underpinning a domestic credit-fuelled consumption and investment boom. These in turn made the growth process more vulnerable to internally and externally generated crises, as is now becoming clear.

Key words: Financial crisis, India, Growth, Exports, Foreign investment, Exchange rate, Consumption, Savings, Investment, Employment, Unemployment, Credit-financed growth, Stock market, Risk, Financial vulnerability

JEL classifications: E200, E240, G100, G180

1. Introduction

A noteworthy feature of the current global crisis has been the failure of most mainstream analysts (unlike heterodox economists such as Patnaik, 2008, and Kregel, 1998, 2008, among others) to predict its onset, estimate its duration and severity or lay bare the mechanisms that contributed to its unfolding. This weakness of telescopic and analytical faculty has been most evident with respect to developing Asia, especially China and India. Even as the global crisis and its effects were being recognised with a lag, Asian developing countries—and these two countries in particular—were seen as the potential shock absorbers in the global system, with predictions that their persisting expansion and relatively high rates of growth would prevent the global downturn from becoming a meltdown (Bergsten, 2008; Kohn, 2008). Such arguments were reinforced by econometric studies (e.g. Kose *et al.*, 2008), which found evidence of divergence of business cycles across developed and emerging market economies in the period of globalisation.

Three features of the economic performance of China and India were seen to warrant this assessment. The first was the superior performance in gross domestic product (GDP)

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Address for correspondence: Jayati Ghosh; email: jayatig@bol.net.in

* Jawaharlal Nehru University, New Delhi, India.

and productivity growth over more than a decade of these two economies, especially China, as compared to developed countries such as the USA (Table 1). It was argued that this higher growth must have resulted from mechanisms other than just stimuli linked to global integration. Demographic features, potentially large domestic markets and 'favourable' policy environments were typically offered as alternative forces driving growth (Goldman Sachs, 2007). Second, these countries are large in terms of geography and population, but despite recent growth they remain far behind the developed world in terms of per capita income and levels of productivity, so the scope for the 'catch-up' process to continue was estimated to be large. Lower per capita incomes also implied that their growth would generate demands for food, natural resources and manufactures from the rest of the world that would contribute to growth in a wide range of economies. Decoupled giants driven by internal stimuli were seen to be obvious buffers against a global recession.

The third feature that was noted was the ability of China and India to avoid major financial crises such as have affected a number of other emerging markets, along with their rapid accumulation of foreign exchange reserves. It was argued that these features were the consequences of a 'prudent' even if extensive programme of global economic integration and domestic deregulation, which involved substantial financial liberalisation but included some capital controls and limited convertibility of the currency for capital account transactions. Such prudence was seen to have ensured that China and India remained unaffected by the contagion unleashed by the East Asian financial crisis in 1997 and subsequently kept them protected from crises that could have cut short their high growth episodes (Cornia, 2006).

However, recent events have exposed the fallacy of 'decoupling'. In this paper, we argue that the presumption that the Indian economy was on a robust growth trajectory decoupled in important ways from the international system is wrong. Rather, the recent boom was fundamentally dependent upon greater global integration, which also made the growth process more uneven and more vulnerable to internally and externally generated crises (Chandrasekhar and Ghosh, 2004, 2006). It is commonly perceived that this reflected the impact of trade liberalisation, but in fact changes in finance were probably more significant, in ways elaborated below. Essentially, recent growth was related to financial deregulation that sparked a retail credit boom and combined with fiscal concessions to spur consumption among the richest quintile of the population. This led to rapid increases in

Table 1. Selected economic and productivity indicators for the USA, China and India: 1995–2004

Country	GDP 2004 (US\$)	Productivity growth (% average annual change)			Productivity levels GDP (US\$)	
		1995–2004	1995–2000	2000–04	Per employee 2004	Per capita 2004
USA	100	2	2.3	1.7	100	100
China	71	5.5	3.1	8.6	13	16
India	28	4.2	4	4.4	10	8

Notes. Productivity growth is measured on the basis of GDP per employee. GDP is in US dollars converted at 1990 purchasing power parities. China does not include Hong Kong.

Source. Conference Board and Groningen Growth and Development Centre, Total Economy Database (September 2006), quoted in National Science Board, 2008 and available at <http://www.nsf.gov/statistics/seind08/pdf/c06.pdf>.

aggregate GDP growth, even as deflationary fiscal policies, poor employment generation and persistent agrarian crisis reduced wage shares in national income and kept mass consumption demand low (Chandrasekhar and Ghosh, 2007). The substantial rise in profit shares in the economy and the proliferation of financial activities (which together with real estate accounted for nearly 15% of GDP in 2007–08) combined with rising asset values to enable a credit-financed consumption splurge among the rich and the middle classes especially in urban areas, which in turn generated higher rates of investment and output over the upswing. The earlier emphasis on public spending as the principal stimulus for growth was thus substituted in the 1990s with debt-financed housing investment and private consumption of the elite and burgeoning middle classes. The recent Indian growth story in its essentials was therefore not unlike the story of speculative bubble-led expansion that marked the experience of several other developed and developing countries in the same period.

By the middle of 2008, this process too was reaching its limits. The dependence of GDP growth upon largely debt-fuelled consumption of a relatively small segment of the population rather than mass demand meant a more limited and ultimately more fragile domestic market. Export growth [in software, information technology (IT)-enabled services and some manufactures] remained high but exports were not large enough to counter domestic decelerating tendencies. High rates of investment were driven by expectations of rapid growth of the domestic market as well as very substantial fiscal sops in the form of tax incentives and implicit subsidies, but the latter could not increase beyond a certain point. As a result, Indian economic growth started decelerating early in 2008, even before the effects of global slowdown were transmitted through sharply declining exports. Real GDP growth, which was 9% in the financial year April 2007 to March 2008, decelerated to 7.6% in both the subsequent quarters. Industrial production peaked in December 2007, fell by 6.5% in April 2008 and remained well below the earlier peak until January 2009. So the internal bubble-generated growth process had already begun to slacken when the impact of the global crisis created further adverse pressures.

2. The export slowdown

With the onset of the crisis, growing trade integration implied that one of the routes through which the real economy was affected was a deceleration in exports of goods and services, which had contributed significantly to the earlier boom. Trade to GDP ratios in India increased from 11% in 1995 to 23% in 2006. However, unlike China, where much of the export expansion was on account of manufactures, export growth in India was principally due to services. In the merchandise trade area, India's export success was restricted to a few sectors such as garments, chemicals, pharmaceuticals and metals and engineering goods. While the first three categories of exports grew because of dynamism in the global market, the latter two were largely driven by increased demand from China in the period since 2002.

In services, however, India emerged as the largest exporter of computer and information services in the international economy in 2005, and its share in world exports of computer and information services was 17% in 2006 (World Trade Organisation, quoted in Reserve Bank of India, 2009F). Services in general have come to dominate the Indian economy, accounting for more than half its GDP, contributing an overwhelming share to its recent relatively high rate of growth and even giving rise to arguments about services emerging as the Kaldorian growth sector in India (Dasgupta and Singh, 2006). Services (excluding construction) accounted for 56% of the increment in GDP at factor cost over the period

1996–97 to 2006–07 (computed from National Accounts Statistics data, available at Reserve Bank of India, 2008).

Within services, the share of software and IT-enabled services in the incremental GDP generated from services had been rising, with a significant share coming from exports. Gross exports of software, business, financial and communication services amounted to 5.3% of GDP at market prices in 2007–08, with software services exports touching 3.4% of GDP, compared with 14.2% for merchandise exports.¹ Service exports were therefore not just important sources of growth but also of foreign exchange earnings, supporting the balance of payments and making up for the fact that liberalisation did not really trigger a merchandise export boom from the country. However, dependence on such service export-led growth was also a source of potential vulnerability, given the high degree of concentration of exports to a few developed countries: the USA accounted for 61% and the UK for 18% of India's IT-Business Process Outsourcing (BPO) export revenues in 2006–07 (NASSCOM figures quoted in Reserve Bank of India, 2009F). Moreover, since the mid-1990s, a rising share of remittances, which was the other major contributor to inflows on the current account of the balance of payments, came from the USA, reflecting the growing number of short-term migrants on H1-B visas offering software and IT-enabled services on location. This too could be seen as a form of income from trade in services, largely earned in the USA and a few other developed industrial countries.

Given these forms of integration through trade, it was only to be expected that the global slowdown would directly affect exports and economic activity in India. Merchandise trade was the first to be affected. Merchandise exports in October–December 2008 were more than 10% lower than their value a year earlier. Import values on the other hand continued to increase, albeit at a slower rate because of falling world oil prices. As a result, the trade deficit for the period from October to December 2008 widened to \$36.3 billion, 40% higher than a year earlier and estimated to be as much as 12.6% of GDP (calculated from data in Reserve Bank of India, 2009A).

To some extent the implications of the widening trade deficit were mitigated by the neutralising effects of exports of services and remittance inflows, which continued to increase in this period. Therefore the current account deficit was significantly lower than the trade deficit, but even so it increased to 5.1% of GDP for October–December 2008, more than double the ratio for the same months in the previous year (Central Statistical Organisation, 2009; Reserve Bank of India, 2009A).

A lag in the effects of the global crisis on net services exports from India was to be expected, given that contracts in software and Business Process Outsourcing services are typically signed for long periods such as two to three years. The effect of the crisis would be on the renewal of contracts and the signing of new contracts, and the initial impact on aggregate revenues would be proportionately lower according to the weight of legacy contracts in total. The lag was likely to be even longer in the case of remittances because workers who lose their jobs abroad and return home tend to bring their accumulated savings, and this windfall effect initially more than compensates for the fall in the remittance flows resulting from lower overseas employment. In addition, rupee depreciation over 2008 accompanied by growing interest rate differentials was likely to have encouraged larger remittances through rupee denominated non-resident accounts.

¹ Figures computed from data reported by Reserve Bank of India at [http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/T%2042%20\[Trade%20and%20Bal\].pdf](http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/T%2042%20[Trade%20and%20Bal].pdf) and Central Statistical Organisation at http://mospi.gov.in/qr_estimate_gdp_curr_prices_12march09.pdf, accessed 17 April 2009.

However, by early 2009 it was evident that these lags had been covered as several software and IT services firms in India predicted lower revenue growth, cut back on recruitment and even started laying off workers (Business Intelligence, 2009; Indiatimes Infotech, 2009; Lakshman, 2009; *The Economic Times*, 2009). Meanwhile, since North America accounted for nearly 44% of the total remittances to India (followed by the Middle East with 24% and Europe with 13%), the severity of the recession in the USA and developments with regard to use of H1-B workers and issue of H1-B visas would continue to affect remittance inflows. The World Bank (2008) has estimated that remittance inflows to South Asia will be flat with zero growth in 2009, compared with the 16% growth experienced in 2008.

Also, by early 2009 the adverse employment effects of the merchandise export decline were evident despite the absence of large survey data on employment. Official surveys have indicated rapid and accelerating job losses in sectors such as textiles and garments, metals and metal products, automobiles, gems and jewellery, construction, transport and the IT/BPO industry (Labour Bureau, Ministry of Labour and Employment 2009). While employment declines were predictably higher in the export-oriented sectors, it is noteworthy that these surveys have found growing job losses in activities that cater dominantly to the domestic market as well. In addition to quantity adjustment in the labour market, workers' incomes were also hit, with reports of falling real—and sometimes even nominal—wages of workers in industry and services as well as reduced incomes of self-employed workers who constituted more than half the work force by 2005 (National Commission for Enterprises in the Unorganised Sector, 2008). Agriculturalists, especially those producing export crops whose global prices had collapsed, faced growing difficulties on top of their existing financial problems reflecting rising input costs and large burdens of debt. Meanwhile, liquidity trap conditions were evident as 'secure' borrowers were unwilling to invest because of greater uncertainty. Small scale producers in all sectors were squeezed by the pincer movement of falling demand and credit crunch as even informal sources of credit dried up. Since these producers account for the bulk of employment in manufacturing and services and typically hire workers on informal casual contracts, their economic difficulties translate directly into reduced employment. Surveys of home-based workers reported rapidly declining orders and falling piece rate wages, even in nominal terms, for work that formed part of wider production chains for both domestic and export markets (All India Democratic Women's Association, 2009).

Two other effects of the crisis on general living conditions deserve to be noted. First, the state governments—who in India's federal system are directly responsible for much of the public expenditure that directly affects citizens, such as on health, education, sanitation and infrastructure—have found their tax receipts falling below projections due to the downswing. Since they face hard budget constraints and many of them are subject to stringent fiscal responsibility conditions forced on them by the central government, this has constrained their expenditure and reduced essential spending on basic services, not to mention development. Second, while aggregate inflation rates have been near zero for the year April 2008—March 2009, the prices of food and essential medicines have continued to increase, even as unemployment has increased, wage incomes have stagnated or fallen and cash crop producers have faced falling prices.

3. Capital inflows and the financial sector

Employment declines in the non-export sectors suggest that the route by which the effects of the international crisis are being transmitted to India go beyond just external trade. One

obvious alternative route is the effect of the crisis on cross-border capital flows, which had shown a dramatic increase in the preceding boom. Foreign investment flows rose sharply from US\$4.9 billion in 1995–96 to US\$29.2 billion in 2006–07 and then more than doubled to US\$61.8 billion in 2007–08 (Reserve Bank of India, 2009B). In 2007–08, capital inflows into India amounted to over 9% of GDP, even though the current account deficit in the balance of payments stood at just 1.5% of GDP (Subbarao, 2009). Thus, the accumulation of large foreign exchange reserves was the result of capital inflows that were far in excess of India's current account financing needs. The greater part of capital inflow was in the form of portfolio investment, which was stimulated by a continuous process of liberalisation of the various rules governing such investment: its sources, its ambit, the caps it was subject to and the tax laws pertaining to it (Chandrasekhar, 2008). The process of liberalisation also kept alive expectations that the caps on foreign direct investment in different sectors would be relaxed over time, thereby providing the basis for eventual foreign control. Those who acquired shares could hope to sell them later at a profit to firms interested in acquisitions. One consequence was the rapid expansion of private equity in India and a private placement boom, which was not restrained by the extent of free-floating shares available for trading in stock markets.

However, liberalisation was a necessary condition for such inflows, but not a sufficient one: while financial liberalisation began early in the 1990s, the surge in foreign investment flows occurred much later. Until 2003, net inflows were relatively low, reaching a maximum of US\$8.2 billion in 2001–02 even though rules regarding foreign portfolio investment in the Indian stock market and external commercial borrowing by Indian firms were liberalised in 1993. Net capital inflows rose to US\$15.7 billion in 2003–04, partly encouraged by tax concessions offered to foreign investors in that year. Thereafter, for a variety of reasons, India was 'discovered' by foreign investors and effectively became the target of a capital investment surge. More recently, foreign investment flows to India more than doubled from US\$29.2 billion in 2006–07 to US\$61.8 billion in 2007–08. This occurred even as capital was fleeing other Asian emerging markets: net equity investment into Asian emerging markets (China, India, Indonesia, Malaysia, Philippines, South Korea and Thailand) fell from US\$122.6 billion in 2006 to US\$57.9 billion in 2008 (Institute for International Finance, 2009). This suggests that India was serving as a hedge for financial investors when uncertainties were engulfing emerging markets elsewhere in Asia and the world.

Capital inflows rose also due to large increases in commercial borrowing by private sector firms. As constraints on external commercial borrowing by domestic companies were relaxed and because interest rates ruled higher in the domestic market, large Indian firms at the margin took the syndicated loan route to borrow money abroad at relatively lower interest rates. They engaged in a version of the carry trade, borrowing money in foreign exchange from the international markets where interest rates were lower and making investments in India (in addition to leveraging investments and acquisitions abroad). Net external borrowing by India rose from US\$24.5 billion in 2006–07 to US\$41.9 billion in 2007–08, with the bulk of the increase in the form of short term borrowing. The stock of India's liabilities in the form of debt securities, trade credits and loans rose from US\$105.1 billion at the end of June 2006 to US\$175.6 billion at the end of September 2008 (Reserve Bank of India, 2009D).

A surge of external equity and debt inflows of this kind, combined with a much smaller increase in the current account deficit and a liberalised exchange rate regime, is likely to exert upward pressure on the domestic currency. This would adversely affect the country's export competitiveness and encourage further speculative inflows of capital. To forestall

such effects, the central bank typically seeks to manage the exchange rate by buying up foreign currency and building its reserves, and this was in fact the policy of the Reserve Bank of India. As a result, India’s foreign exchange reserves increased from just US\$76.1 billion at the end of March 2003 to US\$309.7 billion at the end of March 2008, essentially due to increased inflows of short-term foreign capital (Reserve Bank of India, 2009C). At more than 15 months’ worth of imports, these reserves were clearly excessive and became a symptom of India’s integration with the world system through the capital inflow route.

Dependence on portfolio equity and debt inflows of this magnitude meant that if any internal or external development was seen to warrant pulling out of India, the exit could be as strong as the earlier inflow of foreign capital. The outbreak of the global crisis therefore resulted in a sharp outflow of capital, especially portfolio capital brought into the stock market by foreign institutional investors (FIIs). Needing cash to meet commitments and cover losses at home, these FIIs sold out in Indian markets and repatriated capital abroad—as much as \$27 billion net outflow in the period April–December 2008 (Reserve Bank of India, 2009G).

One consequence of the capital outflow was a collapse of India’s stock markets, just as the earlier capital inflows had triggered a speculative bubble in both stock and real estate markets. They had caused an unprecedented rate of asset price inflation in India’s stock markets and substantially increased volatility. FII investments were an important force, even if not always the only one, driving markets to unprecedented highs, with a high degree of correlation between cumulative FII investments and the level of the Bombay Stock Exchange (BSE)’s Sensitive Index (Sensex), as is evident from Figure 1.

Stock markets in developing countries like India are thin or shallow in at least three senses. First, stocks of only a few companies are actively traded in the market. Second, of these stocks there is only a small proportion that is routinely available for trading, with the rest being held by promoters, the financial institutions and others interested in corporate

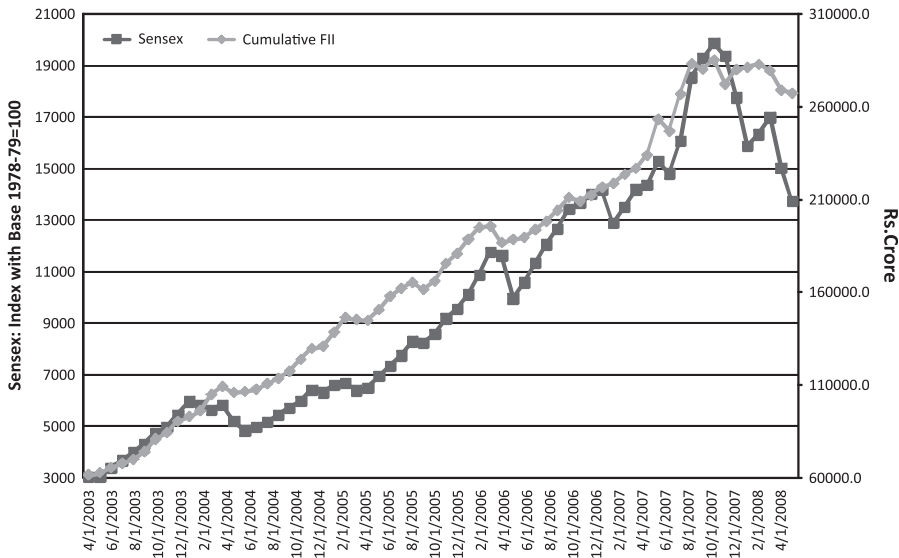


Fig. 1. Net foreign institutional investors stock of equity investment and Bombay Stock Exchange Sensitive Index.

Source: Reserve Bank of India (2008).

control or influence. Third, the number of players trading these stocks is also small. The net impact is that speculation and volatility are essential features of such markets. Because an increase in investment by FIIs triggers a sharp price increase, it provides additional incentives for FII investment and in the first instance encourages further purchases, so that there is a tendency for any correction of price increases to be delayed. When the correction does begin, it typically has to be led by an FII pullout and can then take the form of an extremely sharp decline in prices. In addition, the inflow of foreign capital can result in an appreciation of the rupee, which increases the return earned in foreign exchange. As a result, the investments turn even more attractive, triggering an investment spiral that implies an even sharper fall when any correction occurs. In turn, the growing realisation by the FIIs of the power they wield in such shallow markets encourages speculative investment aimed at pushing the market up and choosing an appropriate moment to exit. This implicit manipulation of the market, if resorted to often enough, obviously generates a substantial increase in volatility. And in such volatile markets, domestic speculators also attempt to manipulate markets in periods of unusually high prices.

All that said, the four years ending in early 2008 were remarkable because of the prolonged bull run in the Indian stock market, which to some extent did help to finance the investment boom underlying India's growth acceleration. Between 2003–04 and 2006–07, which was a period when FII inflows rose significantly and stock markets were generally buoyant, equity capital mobilised by the Indian corporate sector nearly tripled in value, mostly through private placement. Such sales were encouraged by the high valuations generated by the boom and were, as in the case of stock markets, made substantially to foreign financial investors.

After such a speculation-induced bubble, the reverse tendency of collapse in stock markets was triggered by the exit of foreign investors, who then responded to the stock market decline in a cumulative process. This affected not just stock market valuations but also the external reserve position and the exchange rate. By October–December 2008 the entire capital account turned negative, with a deficit amounting to an estimated 1.3% of GDP. While this was mainly due to net outflows under portfolio investment, banking capital and short-term trade credit, there were also falls in foreign direct investment and external commercial borrowings inflows. Even inflows under short-term trade credit declined. This led to an overall balance of payments deficit for that three-month period of as much as 6.2% of GDP. In the circumstances it was not surprising that India's foreign exchange reserves, which stood at US\$316 billion in June 2008, fell to US\$248.6 billion by the end of January 2009. This was a significant fall, but the volume of reserves still remained high, amounting to around 9 months' worth of imports (Reserve Bank of India, 2009C).

Another consequence of the outflow of capital was a sharp depreciation of the rupee, by more than 30% vis-à-vis the US dollar in the year to March 2009, taking the currency's value to more than 51 rupees to the dollar. The sharp depreciation of the rupee in the first quarter of 2009 obviously reflected the large overall balance of payments deficit, but it could generate its own momentum to cause further depreciation over time. One reason for this is the increase in India's external debt, which was associated with increased demand for foreign exchange to meet interest and amortisation payment commitments. The resulting tightness in the foreign exchange market could create self-fulfilling expectations of future depreciation, as those with pending payment commitments buy up foreign exchange, exporters delay repatriation of revenues and speculators transfer foreign exchange out of the country.

One indicator of the last of these tendencies is the movement of foreign exchange out of the country in the form of outward remittances under the liberalised remittance scheme for resident individuals. These remittances totalled US\$9.6 million, US\$25 million and US\$72.8 million in the three years ending 2006–07. But they shot up to US\$440.5 million in 2007–08 (Reserve Bank of India, 2009E). This is possibly indicative of the speculative trends pushing down the value of the rupee. In the face of determined speculation even reserves in excess of US\$200 billion are no insurance against a crisis. Rupee depreciation and the stock market collapse thereby have increased the possibility of a currency crisis in future.

4. The crisis and credit-financed demand

A third way in which integration has influenced the way in which the global crisis has affected India is its impact on the role played by credit in financing private consumption and investment. Internal financial liberalisation in India had resulted in a process of institutional change in which the role played by state-owned financial institutions and banks was substantially altered. As regulatory structures for private banks were dismantled over the 1990s, and private banks cornered the most lucrative clients, even public sector banks had to alter their strategies to seek new sources of finance, new activities and new avenues for investments, so that they could shore up their interest incomes as well as revenues from various fee-based activities. So banks linked up with insurance companies and entered other 'sensitive' markets like the stock and real estate markets. This led to a relatively rapid transformation of banking in India, with growing exposure of commercial banks to the retail credit market with no or poor collateral, the associated accumulation of loans of doubtful quality in their portfolios, and a growing tendency to securitise personal loans.

Total bank credit grew at a scorching pace from 2005 onwards, at more than double the rate of increase of nominal GDP. As a result, the ratio of outstanding bank credit to GDP (which had declined in the initial post-liberalisation years from 30.2% at the end of March 1991 to 27.3% at the end of March 1997) doubled over the next decade to reach about 60% by the end of March 2008. Thus, one consequence of financial liberalisation was an increase in credit dependence in the Indian economy, a characteristic imported from developed countries such as the USA. This increase in credit could be positive insofar as it reflected a greater willingness on the part of banks to lend: the growth in credit outperformed the growth in deposits, resulting in an increase in the overall credit–deposit ratio from 55.9% at end March 2004 to 72.5% at end March 2008. This increase was accompanied by a corresponding drop in the investment–deposit ratio, from 51.7% to 36.2%, which indicates that banks were shifting away from their earlier conservative preference to invest in safe government securities in excess of what was required under the statutory liquidity ratio norm. (Data in this and the subsequent four paragraphs are from Committee on Financial Sector Assessment, 2009.)

However, rapid credit growth meant that banks were relying on short term funds to lend long. From 2001 there was a steady rise in the proportion of short term deposits with the banks, with the ratio of short term deposits (maturing up to one year) increasing from 33.2% in March 2001 to 43.6% in March 2008. On the other hand, the proportion of term loans maturing after five years increased from 9.3% to 16.5%. While this delivered increased profits, the rising asset–liability mismatch increased the liquidity risk faced by banks.

These changes do not appear to have been driven by the commercial banking sector's desire to provide more credit to the productive sectors of the economy. Instead, retail loans became the prime drivers of credit growth. The result was a sharp increase in the retail exposure of the banking system, with overall personal loans increasing from slightly more than 8% of total non-food credit in 2004 to close to 25% by 2008. Of the components of retail credit, the growth in housing loans was the highest in most years. As Table 2 indicates, the (new) private banks were the most enthusiastic adopters of such a strategy, followed by foreign banks.

This rapid increase in credit and retail exposure, with inadequate or poor collateral, would have brought more tenuous borrowers into the bank credit universe. A significant (but as yet unknown) proportion of this could be 'sub-prime' lending. According to one estimate, by November 2007 there was a little more than 400 billion rupees of credit that was of sub-prime quality, defaults on which could erode the capital base of the banks.¹ To attract such borrowers, the banks offered attractive interest rates below the benchmark prime lending rate. The share of such loans in total rose from 27.7% in March 2002 to 76.0% at the end of March 2008. This increase was especially marked for consumer credit and reflected a mispricing of risk that could affect banks adversely in the event of an economic downturn.

Additional evidence of mispricing of risk in the Indian financial system came from the exposure of the banking system to the so-called 'sensitive' sectors, like the capital, real estate and commodity markets. This increased to 20.4% of aggregate bank loans and advances in March 2007, with real estate contributing 18.7 of that figure, the capital market 1.5 and commodities 0.1. Further, the off-balance sheet exposure of banks increased significantly from 57% of total bank assets at the end of March 2002 to 363% at the end of March 2008.

This increase was mainly on account of derivatives, whose share averaged around 80%, and once again was led by private and foreign banks. Public sector banks followed, with their exposure rising subsequent to the amendment of regulations to permit over-the-counter transactions in interest rate derivatives. Since the current accounting standards in India do not clearly specify how to account for and disclose losses and profits arising out of derivatives transactions, the propensity of some players to use derivatives to assume

Table 2. *Personal loans as per cent of total outstanding credit of commercial banks*

	1996	2000	2007
State Bank of India and associates	9.5	10.7	22.0
Other nationalised banks	9.1	10.9	15.8
Foreign banks	8.8	17.1	24.8
Regional rural banks	10.5	18.8	20.5
Private sector banks	9.7	7.9	37.3
All scheduled commercial banks	9.3	11.2	22.3

Source: Reserve Bank of India, 1997–2008.

¹ Estimate by M. G. Bhide, cited by S. S. Tarapore, former Deputy Governor of the Reserve Bank of India in a speech in Mumbai reported in Business Line Bureau (2007).

excessive leverage made it difficult to gauge the actual market and credit risk exposure of commercial banks.

These changes in the financial sector point to two further ways in which the current global crisis can continue to affect India. First, the credit stringency generated by the exodus of capital from the country and the uncertainties generated by the threat of default of retail loans that now constitute a high proportion of total advances could freeze up retail credit and curtail demand, as is happening in the developed industrial countries. Second, individuals and households burdened with past debt and/or uncertain about their employment would prefer to postpone purchases and not to take on additional interest and amortisation payment commitments. Thus, the off-take of credit can shrink even if credit is available, resulting in a fall in credit-financed consumption and investment demand. Since growth in a number of areas such as the housing sector, automobiles and consumer durables had been driven by credit-financed purchases encouraged by easy liquidity and low interest rates, this would immediately affect the demand for housing, automobiles and durables. This, in turn would have second-order effects in terms of contracting demand for other sectors and economic activities. As a result, a wide range of industries, services and segments of the labour market are likely to be indirectly affected by the crisis.

A growth slowdown, if it is sharp and severe in terms of its employment effects, could lead to defaults on the accumulated legacy of retail credit. Combined with losses on investments triggered by the growing appetite for risky assets among scheduled commercial banks after liberalisation, this poses a real danger of insolvencies because of an increase in the proportion of non-performing assets in the Indian banking sector.

5. The Indian government's response

When the crisis first broke internationally, within official circles in India there was a perception that the Indian economy would be less affected and the Indian financial sector would be relatively immune to the winds from the international financial implosion. The presence of a large nationalised banking sector and a somewhat more stringent regulatory regime for real estate lending by banks were seen to protect the Indian financial system from harmful contagion from abroad. However, as shown in previous sections, these expectations have been belied, with sharp changes not only in real economic indicators, particularly for export production and employment, but also in financial variables such as stock market behaviour, bank lending behaviour and currency market trends.

The initial responses of the government focussed on the financial side of the current crisis, with three major components to the first stimulus package adopted in late 2008. These included measures by both the Reserve Bank of India and the government aimed at reducing interest rates and increasing the access to credit of large and small firms, state governments and individuals. At the same time, access to credit from foreign sources was sought to be enhanced through measures that lifted the remaining constraints on external commercial borrowing. The ceiling on FII investment in rupee-denominated corporate bonds was more than doubled. The slogan appeared to be, 'if domestic credit is unavailable or expensive, borrow from abroad'. There were also measures aimed at getting state governments and an infrastructure investment fund set up by the central government, the India Infrastructure Finance Company Limited (IIFCL), to borrow more to finance capital, especially infrastructure, expenditure. Finally, there were attempts to spur the demand for automobiles through various incentives to buyers and to banks to provide

credit for such purchases. So banks and financial institutions were encouraged to lend and different economic actors were invited to borrow and spend. This included borrowing in foreign exchange to finance expenditures in areas like real estate, which are unlikely to yield foreign currency revenues that can be used to meet future repayment commitments.

Even if they had worked, such policies would only have strengthened the very same economic tendencies that generated the crisis in the developed countries in the first place. In any case, and perhaps unsurprisingly, by April 2008 it was already evident that these monetary measures had all proved to be lacking and did not ease credit conditions in any meaningful way. This was partly because of the liquidity trap characteristics of the situation as the most credit-worthy potential borrowers were unwilling to borrow because of the prevailing uncertainties and expectations of slowdown, and partly because banks also suddenly became more risk-averse. This meant that all other enterprises, even those who desperately required working capital just to stay afloat, found it increasingly difficult to access bank credit even as they faced more stringent demand conditions.

In such a situation, reducing interest rates does not solve the basic problem of tightened credit provision, even though it may marginally reduce costs for those who are able to access bank credit. The real economy is unlikely to be revived through such measures in the absence of a strong fiscal stimulus. It is now increasingly accepted that there is no alternative to the standard Keynesian device of using an expansionary fiscal stance to create more economic activity and demand, and thereby lift the economy from slump. Even so, the Government of India took an inordinately long time to announce what turned out to be a relatively small fiscal package, involving less than 0.5% of GDP of additional direct public spending. This was combined with various tax cut measures, with estimated revenue losses still less than 1% of GDP.

While the overall fiscal deficit (of central and state governments together) in the fiscal year 2009–10 is likely to increase to around 12% of GDP, a large part of it is likely to be the result of tax cuts and subsidies rather than direct spending. There are several problems with relying upon such price-based fiscal measures. To begin with, tax cuts have an impact in terms of supporting economic activity only if producers respond by cutting their own output prices, and such price cuts in turn generate demand responses, or if they enable firms that would otherwise have closed down to survive. But neither is inevitable, nor even very likely given prevailing market structures in India. Across the world, governments are finding that in times of economic uncertainty, tax cuts are much less effective in stimulating activity than direct government expenditure. Similarly, measures that try to provide additional export incentives (such as interest reductions for export credit) to exporting sectors such as textiles, garments and leather do not counteract the effect of large losses of export orders as the major markets start shrinking.

Therefore direct public spending would be a far more effective way of dealing with the current slowdown even in India. However, the fiscal stimulus provided thus far has been both too small to have much impact and also not directed towards forms of expenditure that are likely to have high multiplier effects. Some of the most critical areas of potential spending have been ignored or neglected, such as increased resources to state governments, direct investment to ensure mass and middle-class housing, interventions to improve the livelihood conditions of farmers, expansion of the public food distribution system, enlargement of employment schemes and provision of social security.

While monetary policies are not sufficient to address the current economic problems in India, obviously measures to control finance are required, especially to prevent excessive risk-taking that destabilises the real economy. Yet the Indian government appeared to buck

the recent global policy trend by moving towards *more* financial deregulation and privatisation of existing public financial institutions. In particular, its strategy seemed to be to further inflate the embryonic credit bubble to prevent growth from slipping sharply, in other words generating another speculative bubble to drive the real economy recovery, regardless of the possibility that this could pave the way for a financial meltdown that would subvert such a recovery. But such a possibility must be acknowledged. Even if it is not as yet in a debt-driven crisis, the Indian economy is substantially dependent on rapid expansion of private credit to sustain growth.

In addition, the government strategy has pushed infrastructural investment financed not only with domestic debt, but also with external commercial borrowing. While infrastructure investment is clearly much needed, relying on external borrowing for such investment not merely adds to the debt spiral, but also involves a currency mismatch, since infrastructure projects do not directly yield foreign exchange revenues and the indirect impact on exports is likely to be positive but difficult to assess. On the other hand, with global interest rates much lower than domestic rates, firms may not adequately take account of exchange rate risks and opt for foreign borrowing whenever available. This could lead to solvency problems if the rupee depreciates sharply, and would strain India's foreign reserve position if the exodus of foreign capital continues.

One of the lessons of the global crisis is that if big financial firms are lightly regulated and permitted to discount risk when seeking profits, then it is likely that the government would eventually have to nationalise them, because letting them fail could have adverse systemic effects. So the neoliberal strategy of deregulation and a minimal role for the state by relying on debt-financed private consumption and investment leads eventually to a crisis-induced retreat from neoliberalism, in the form of nationalisation and state-financed bailouts. As the Indian crisis unfolds, the reliance of the Indian state on encouraging more private debt-financed spending to trigger a recovery is likely to lead to a similar denouement.

An alternative strategy for more sustainable recovery would clearly have to rely on a different basis for future growth. Given that the recent economic expansion of the Indian economy did not provide improved living standards for the bulk of the population, such an alternative strategy seems to be fairly obvious: emphasise wage-led growth, based on fiscal and monetary policies that provide greater stimuli to production for mass consumption in the domestic market. Monetary policy would have to prioritise financial inclusion, in particular enlarging the access of farmers and small producers in the non-agricultural sector to institutional credit and other financial services. In terms of fiscal policy, significantly increased public spending on infrastructure (particularly in rural areas, such as ensuring universal access to electrification, sanitation and paved roads, for example) and health and education, would not only ease supply constraints significantly but also provide employment with very large multiplier effects. A special package for agriculturalists, to help them cope with the rising costs of cultivation and extremely volatile crop prices, would help stabilise the rural economy. Food grains and essential agricultural commodities procured at remunerative prices should be distributed through an extensive public distribution system at prices that help sustain the minimum required consumption by the poor, so as to ensure price stability without damaging incentives in production, suppressing non-food consumption and worsening poverty. Fiscal measures would also have to provide incentives to shift patterns of both consumption and production to more sustainable directions. Such increased expenditure need not lead to much larger fiscal deficits if the existing loopholes for tax evasion are effectively plugged.

Of course, all this is obviously only possible if the economy is not subject to destabilising flows of capital and sharp fluctuations in imports and exports. A greater degree of management of both trade and capital accounts is therefore a precondition for the successful implementation of such a strategy.

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