# The Macroeconomic Context

## Introduction

Between 1997–98 and 2007–08, the Reserve Bank of India functioned in a fast-changing economic environment. The two defining features of the process of change were the continuation of the economic liberalisation process begun earlier and the increasing openness of the Indian economy. This chapter provides a review of these two developments and a descriptive account of the behaviour of key macroeconomic variables during the period under reference. The review will serve as a backdrop to the succeeding chapters dealing with the Reserve Bank's policies and operations.

Three themes dominate the narrative: growth, institutional change and openness. During the reference period, India maintained relatively high economic growth, with an intervening period of slowdown. A debate exists on when the economy moved to a higher growth path, to which a reference will be made later in the chapter. The higher growth rate, especially in the latter half of the reference period, was supported by growing domestic savings and investment rates, besides capital flows from abroad. Despite frequent changes of governments, political stance was generally in favour of continuing with economic and financial sector reforms initiated in the early 1990s. Interestingly, more than any other sector of the economy, the services sector propelled growth; services came to occupy a dominant share in the gross domestic product (GDP).

Inflation was relatively moderate despite high monetary and credit expansion. However, increasing global oil prices and domestic food price inflation started exerting pressure on prices towards the end of the period. Crucial to Reserve Bank operations, the fiscal situation at both the centre and states gradually improved after 2003. This was achieved thanks to cooperative efforts taken by the government and the Bank to contain deficits at sustainable levels by introducing rule-based fiscal reforms. India's external

sector expanded owing to increasing openness and progressive liberalisation of current and capital account transactions. Growth in the invisibles, especially remittances, supported the current account, where deficit was near-persistent, and unprecedented capital inflows sustained the overall balance of payments position.

The Reserve Bank coordinated closely with the government to sustain the growth process, contain inflation and maintain financial stability through banking and financial sector reforms. The aim of these reforms was to develop markets and institutions, promote competition and efficiency, strengthen prudential standards and, increasingly, financial inclusion. That India dealt with the East Asian financial crisis at the beginning of the period and the beginning of the global financial turmoil towards the end of the period without serious consequences in either case is evidence of successful management of the transition. Strategic capital account management also helped the country ward off the adverse impact of crises (see Chapter 4).

The present chapter has three sections. The next two sections deal with the two key features of the process of macroeconomic transformation of India in the period under discussion: increasing openness and its manifold implications, and persistence with economic reforms despite frequent changes of government. Whereas the former theme belongs to the realm of economics and policy analysis, the latter has attracted attention from political scientists.

Having discussed briefly the international and political environment that enabled changes, we describe later what these changes were, with an overview of trends in the key macroeconomic parameters. Besides analysing the trend during the reference period, an attempt is made to compare these years with the previous decade (more precisely, eleven years, 1986–87 to 1996–97). The analysis shows that the reference period witnessed rapid improvements in almost all spheres, though the pace of change was uneven across areas. Developments relating to the financial sector, in general, will be briefly touched upon in this chapter as these subjects are integral parts of the Bank's policies and operations and are covered in detail in the subsequent chapters.

## The International Environment

A number of global events that occurred during this period impacted India, including the Asian currency and financial crisis (1997), the adoption of the

euro as a single common currency in Europe (1999), the founding of the G20 (or Group of Twenty) (1999), of which India was a member, the dot.com bubble (2000), the increasing prominence of BRICS (Brazil, Russia, India, China and South Africa) as a group of large emerging economies, the United States' (US) invasion of Iraq (2003), the expansion of European Union (EU) membership (2004), the finalisation of Basel II norms by the Bank for International Settlements, or BIS (2004), and the crisis in the subprime mortgage market in the US (2007) which led to a full-blown global financial meltdown (2008).

Despite these landmark events, the global economic and financial system in the 1990s and the early 2000s seemed to display a 'great moderation', at least so it seemed until the 2007–08 crisis broke out.¹ The phrase refers to a substantial fall in the level of macroeconomic volatility since the 1980s. This, in turn, was owing to a fortuitous combination of factors, including an international consensus among monetary authorities on the need to focus on low inflation, greater fiscal discipline, trade liberalisation, deregulation in many industries and privatisation of state-owned enterprises with the objective of improving efficiency.² Information flows greatly improved with the internet revolution.

Furthermore, there was rapid international integration of financial markets that had followed the general trend towards financial market liberalisation in industrial countries from the late 1970s, and the reduction in capital and exchange controls in emerging market countries, including India, from the early 1990s. As a result, the period covered in this volume saw private capital flows on an unprecedented scale. During these years, many emerging economies experienced substantially higher growth than developed economies. Whereas trade and financial linkages between emerging markets and advanced economies had become stronger, the former was also seen to become more resilient to shocks originating in advanced economies. There was, as a result, larger growth of trade among emerging economies, and substantial capital inflows into these countries.

Specific episodes imparted shock effects as well as generated responses that contributed to recovery and renewed growth. The East Asian currency and financial crisis was one of the more important examples. The crisis brought about a sharp decline in domestic demand and economic activity in Thailand, Indonesia, Korea and Malaysia, some of the most successful

and highly open emerging market countries at that time. In fact, their very success had led domestic and foreign investors to underestimate certain institutional weaknesses. Property and stock market values were inflated. Persistence with pegged exchange rate regimes, which came to be viewed as implicit guarantees of exchange value, encouraged external borrowing and led to excessive exposure to foreign exchange risk. Weak management and poor control of risks by banks led to an asset–liability mismatch and bad debt syndrome. Weak transparency norms hid these issues from view. The crises, first in East and Southeast Asia and then in Russia, had contagion effects on other emerging market countries.<sup>3</sup>

The contagion effect was moderate in India, but a number of lessons were learned. A key lesson was the need to address promptly any signs of weaknesses in policies and institutions that might provoke sharp revisions in investor perceptions of a country's prospects. 4 This awareness reaffirmed India's commitment to a calibrated approach to reforms, especially in relation to further opening up. Several key emerging market currencies had been floated, often to resolve problems associated with unsustainable exchange rate pegs after the East Asian crisis.<sup>5</sup> The rupee had already become flexible. But convertibility was another matter. Although two committees went into the issue of making the rupee fully convertible, the actual steps taken were cautious and carefully sequenced. The Asian crisis made multilateral institutions, such as the International Monetary Fund (IMF) and the World Bank, turn their attention to strengthen the architecture of the international monetary systems through development of international standards and principles of good practices. India moved early in subjecting itself to financial sector assessment by the IMF (1999-2000).6 Simultaneously, India also attempted self-assessment by a committee headed by Deputy Governor Y. V. Reddy and later by a committee on financial sector assessment jointly chaired by Deputy Governor Rakesh Mohan and the Secretary (Ashok Chawla [Economic Affairs], D. Subbarao [Finance], Ashok Jha [Finance]), Government of India.<sup>7</sup> These efforts of self-assessment of the Indian financial sector were unique to any country.

There was evidence of a strong rebound in the global economy after the Asian crisis. The economic expansion continued to gain strength in 2000. The September 11 attack and its aftermath contributed to a deterioration in confidence across the globe. Beginning in 2002, the global economy again

witnessed recovery (Table 2.1). By 2004–05, with global trade rising rapidly, financial markets had turned buoyant, and the world economy was growing. World economic outlook improved despite risks of terrorist attacks and a rise in oil prices. The momentum was particularly strong in emerging Asia, where GDP growth was 8.5 per cent in 2004, the highest level since the 1997–98 crisis, underpinned by accommodative macroeconomic policies, competitive exchange rates and the recovery in the information technology (IT) sector. Buoyant growth in China provided support to economic growth within and outside the region.

In 2005, the economic expansion remained broadly on track. Following a temporary slowdown in mid-2004, global GDP growth picked up through the first quarter of 2005, with robust services sector output more than offsetting slower growth in manufacturing and trade. In the second quarter, however, in part reflecting the impact of higher oil prices, signs of a renewed 'soft patch' emerged, with leading indicators turning downwards and business confidence weakening in most major countries. Notwithstanding higher oil prices and natural disasters (the tsunami in southern Asia in 2004), global growth continued to exceed expectations, and growth in emerging Asia rose to 9.2 per cent in 2005.8

The expansionary phase was sustained during 2006 and 2007 notwithstanding the nervousness of financial markets in mid-2007. Global growth worked out to 5.4 per cent and 5.5 per cent in 2006 and 2007, respectively. Rapid growth in emerging market and developing economies was led by China and India. China's economy gained momentum, growing at 12.7 per cent and 14.1 per cent in 2006 and 2007, respectively. India continued to grow at more than 9 per cent. Three countries (India, China and Russia) accounted for one-half of global growth, but other emerging market and developing economies also maintained robust expansion.

Economic growth in the US slowed notably in the fourth quarter of 2007, with indicators showing weakening manufacturing and housing sector activity, employment and consumption. Growth had also slowed in western Europe but the crisis was much deeper in the US, where the housing market correction continued to cause financial stress.

On this occasion, the emerging market and developing economies were less affected by financial market turbulence. Sustained growth was again led by China and India. The momentum came from strong productivity gains

in these countries, and their integration into the global economy. Further, terms-of-trade increases in commodity producers, as oil and other raw material prices soared, helped some oil-exporting countries. The extraordinary growth of China and India was partly a result of their accumulated strengths. Of further help to them were the facts that they were net exporters of capital, were less dependent on foreign finance, and had large foreign exchange reserves, growing trade among themselves, better macroeconomic policies, including flexible exchange rates, rising per capita income, domestic savings, and a growing middle class that supported demand in the home market.<sup>9</sup>

During the reference period, global imbalances, reflected in large mismatches in current account positions among countries, received attention in international circles. Between 2001–02 and 2003–04, India registered modest current account surpluses but this was more of a reflection of a phase of the business cycle, and with the turnaround in the business cycle, India started registering current account deficits. While, generally, current account surplus accounted for a considerable proportion of reserve accumulation in most of the Asian emerging economies and Japan, for India current account surplus had been a minor source of reserve accretion. Capital flows played an increasingly important role in the accumulation of reserves. Besides, the main driver of growth in India had been domestic demand.

Table 2.1 presents trends in global growth during the reference period for a broad group of countries, China and India. Global growth on an average improved from 3.4 per cent from 1986 to 1996 to 4.2 per cent during the reference period, and in the last five years (2003–07), the rise was faster at 5.1 per cent. But the performance of advanced economies deteriorated from 3 per cent in the earlier period to 2.8 per cent in the latter periods. Therefore, the overall improvement in global growth was essentially brought about by contributions from emerging market and developing economies, especially China and India. Emerging Asia grew at an average rate of 9.4 per cent in the last five years of the reference period compared to an average of 7.8 per cent in the previous decade. For India, average growth picked up from 5.7 per cent during 1986–96 to 6.9 per cent during the reference period, and in the last five years, growth was 8.8 per cent.

The power of the global economy to shape India's growth depended on continuing with the institutional and market reform process that had begun earlier. It is to this issue we now turn.

Table 2.1 GDP Growth Rates

(per cent)

Year	World	Advanced Economies	Emerging Market and Developing Economies	Emerging and Developing Asia	China	India
1997	4.0	3.5	4.6	6.1	9.2	4.1
1998	2.6	2.8	2.3	2.8	7.9	6.2
1999	3.6	3.6	3.5	6.6	7.9	8.5
2000	4.8	4.1	5.8	6.5	8.5	4.0
2001	2.5	1.6	3.6	6.1	8.4	4.9
2002	2.9	1.7	4.5	6.6	9.1	3.9
2003	4.3	2.1	7.0	8.4	10.1	7.9
2004	5.4	3.3	7.9	8.5	10.2	7.8
2005	4.9	2.8	7.1	9.2	11.3	9.3
2006	5.4	3.1	7.9	10.1	12.7	9.3
2007	5.5	2.7	8.4	11.1	14.1	9.8
Average for 1997 to 2007	4.2	2.8	5.7	7.4	9.9	6.9
Average for 1997 to 2002	3.4	2.9	4.0	5.8	8.5	5.3
Average for 2003 to 2007	5.1	2.8	7.7	9.4	11.7	8.8
Average for 1986 to 1996	3.4	3.0	3.9	7.8	10.1	5.7

Source: IMF, World Economic Outlook Database, April 2021 edition (https://www.imf.org/en/Publications/WEO/weo-database/2021/April).

Note: Growth rates are based on GDP expressed in domestic currencies.

# **Economic Reforms and the Political Environment**

The end of India's inward-looking and state-dominated economic regime, and the start of the liberalisation process, now constitute too well known a story to deserve a long restatement here. <sup>10</sup> It is necessary, however, to repeat some essential details, because the time span covered in the book was part of the long-term process of reform. As mentioned in the introduction to the chapter,

this phase was marked by further openness and continuing institutional changes in the domestic economy, the pace of which was affected by political shifts. These last two issues will figure prominently in this section.

Although several crucial steps to liberalise the economy were introduced in 1992, it is believed that a partial liberalisation process had started in the mid-1980s. In the earlier phase, when Rajiv Gandhi was Prime Minister, industrial policy was rationalised, and software and telecommunications industries were encouraged. In the latter phase, when P. V. Narasimha Rao was Prime Minister, Manmohan Singh as the Finance Minister initiated new reforms. During the five-year term of the government from 21 June 1991 to 16 May 1996, industrial licensing was abolished, capital markets were reformed, and the foreign investment and the trade regimes were liberalised. There was an accent on the need to reduce fiscal deficit, privatise loss-making public sector enterprises and increase infrastructure investment. Among the measures that mattered to the capital market, the office of the Controller of Capital Issues (CCI) was abolished in 1992. This office had regulated the number of capital issues a company could undertake and the issue prices. The passing of the Securities and Exchange Board of India (SEBI) Act, 1992, and the related amendment to the Securities Contract (Regulation) Act, 1956, introduced a new regulatory framework. The National Stock Exchange (NSE) was started as a computer-based trading system from 1994, and by 1996 it had become the largest exchange in the country. The rupee was made fully current account convertible in August 1994. Equity markets were opened in 1992 to foreign institutional investors.

By the mid-1990s, India recovered from a balance of payments crisis that had occurred in 1990–91. GDP (as per 2004–05 base year) growth, which had fallen to 1.4 per cent in 1991–92, exceeded 5 per cent in the next two years and rose further to more than 7 per cent, on average, in the succeeding three years until 1997.

In 1996, the Congress government lost the general elections and was succeeded by four short-lived governments from 1996 to 1999: the Bharatiya Janata Party under Atal Bihari Vajpayee for thirteen days in 1996, about a year each under the United Front Prime Ministers H. D. Deve Gowda and I. K. Gujral, and Vajpayee again for nineteen months in 1998–99. After Vajpayee was sworn in in 1999, he managed to lead the National Democratic Alliance (NDA) government to a full five-year term until May 2004, the first non-Congress government to do so. In May 1998, nuclear tests and border conflicts in Kargil (mid-1999) caused political uncertainties. These and frequent change of

government had apparently slowed the pace of reforms between 1998 and 2002, the first five years of the time span covered by this history. However, the process did not stall altogether, and with the return of a stable government, it picked up again. The Congress-led United Progressive Alliance (UPA) formed the next government on 22 May 2004 and ruled until the end of the reference period.

These years saw very strong growth of the Indian economy. Despite the frequent change of government between 1996 and 2007, the Finance Ministry was held mainly by three ministers, P. Chidambaram, Yashwant Sinha and Jaswant Singh (Table 2.2). At the same time, by and large, two Governors, Bimal Jalan and Y. V. Reddy, were at the helm of the Reserve Bank. This situation made for an environment of a stable relationship between the Bank and the government despite political shifts.

The average annual growth rate of GDP slowed to 4.5 per cent during 2000–01 to 2002–03. Growth, however, picked up thereafter. For five years from 2003–04, GDP (as per 2004–05 base year) grew by an average rate of around 9 per cent per annum. By then, the private corporate sector had grown stronger and become a more global player than before. The software and information technology-enabled services (ITeS) sectors came of age in the first half of the 2000s. Two factors had changed the image and capability of the

**Table 2.2** Prime Ministers, Finance Ministers and Reserve Bank Governors: 1997–98 to 2007–08

Party/Alliance in Power	Prime Minister	Finance Minister	Reserve Bank Governor
United Front	H. D. Deve Gowda: 1 June 1996 to 21 April 1997	P. Chidambaram: 1 June 1996 to 21 April 1997	C. Rangarajan: 22 December 1992 to 22 November 1997
United Front	I. K. Gujral: 21 April 1997 to 19 March 1998	I. K. Gujral: 21 April 1997 to 1 May 1997; P. Chidambaram: 1 May 1997 to 19 March 1998	Bimal Jalan: 22 November 1997 to 6 September 2003
National Democratic Alliance	A. B. Vajpayee: 19 March 1998 to 22 May 2004	Yashwant Sinha: 19 March 1998 to 1 July 2002; Jaswant Singh: 1 July 2002 to 22 May 2004	Y. V. Reddy: 6 September 2003 to 5 September 2008
United Progressive Alliance	Manmohan Singh: 22 May 2004 to 18 May 2009	P. Chidambaram: 22 May 2004 to 30 November 2008	

Indian IT industry towards the end of the 1990s. First, the Y2K¹² scare caused a sharp increase in demand for less expensive IT professionals worldwide. It gave Indian companies exposure and allowed them to scale up rapidly. Second, the success of expatriate Indians in Silicon Valley gave the Indian industry a lot of confidence as well as market access. The IT revolution soon began to have spin-offs in the form of ITeS such as call centres, medical transcription and servicing of credit card accounts. Armed with rising incomes, consumer loans and credit cards, the Indian consumer began to buy more goods and services. By 2006, there were several shopping malls in every major city.

These factors contributed to economic growth, supported by institutional changes. Institutionally, a lot was achieved by this time. New technologies were introduced, the banking system was overhauled, and the labour force was rationalised in many corporate and industrial firms. In 2001, a huge road-building project called the Golden Quadrilateral was launched. Companies had weathered the storm of a sharp increase in global competition when tariffs were drastically reduced in 1992. There was a feeling that the global success of the software sector could be replicated in other industries. Indian companies began to expand abroad and acquire foreign companies. Meanwhile, several IT and pharmaceutical firms expanded very rapidly by making better use of external markets.

By 2008, the country's economic landscape was looking vastly different. It had foreign exchange reserves of over US\$300 billion, more than its external debt; the share of gross fixed capital formation in private sector in total gross fixed capital formation grew to about three-fourths from about half in the late 1980s; imports plus exports of goods and the invisibles (net) jumped to over 40 per cent of GDP from around 13 per cent during the same period.

Debates continue over why the reforms happened, and how the reform process was sustained for so long despite the frequent change in government, criticisms, and, at times, resistance. The answer to the question is not relevant to the book. It is sufficient to note that two broad perspectives exist on the question; one of these lays emphasis on the rise of pro-market views among policymakers and economists, and the other lays emphasis on the rise of probusiness views in the sphere of politics. <sup>13</sup> The latter perspective suggests that with deregulation, government control on business reduced, creating more opportunities for making deals. The rise of coalition politics and regional political parties encouraged the tendency, especially at the local level.

Having outlined the political and global backdrop, let us turn to the key elements of the process of macroeconomic change in the Indian economy.

## Macroeconomic Trends

# Growth, Savings and Investment

As mentioned earlier, GDP growth accelerated between the 1990s and the 2000s (Table 2.3). As population growth decelerated, per capita net national income growth rate increased from an average of 3.6 per cent during 1986–87 to 1996–97 to 5 per cent in the next eleven years. Table 2.3 confirms a point made earlier: economic activity in India held up relatively well throughout

Table 2.3 Growth, Savings and Investment

(per cent)

Year	GDP Growth at 2004–05 Prices	Per Capita Net National Income Growth at 2004–05 Prices	Gross Capital Formation*	Gross Domestic Savings*
1997–98	4.3	2.2	25.6	24.2
1998–99	6.7	4.6	24.2	23.2
1999–2000	8.0	6.0	26.6	25.6
2000-01	4.2	1.7	24.3	23.7
2001-02	5.4	3.3	24.2	24.9
2002-03	3.9	2.3	24.8	25.9
2003-04	8.0	6.5	26.8	29.0
2004–05	7.1	5.0	32.8	32.4
2005-06	9.5	7.8	34.7	33.4
2006-07	9.6	7.9	35.7	34.6
2007-08	9.3	8.1	38.1	36.8
Average for 1997–98 to 2007–08	6.9	5.0	28.9	28.5
Average for 1997–98 to 2002–03	5.4	3.4	24.9	24.6
Average for 2003–04 to 2007–08	8.7	7.1	33.6	33.3
Average for 1986–87 to 1996–97	5.8	3.6	23.2	21.5

*Source*: Summary of macroeconomic aggregates (Base: 2004–05), Ministry of Statistics and Programme Implementation, Government of India (https://www.mospi.gov.in/web/mospi/download-tables-data/-/reports/view/templateOne/16701?q=TBDCAT).

Note: \* Per cent of GDP at current prices.

the financial crisis in Asia, supported in part by earlier structural reforms. Being a relatively closed economy, capital controls also helped limit India's vulnerability to abrupt movements in short-term capital. Long-term capital flows were affected by the regional turmoil and the sanctions that followed the nuclear tests in May 1998.

Although not a deep crisis, there was still a slowdown in economic growth in 1997–98 compared to the previous three years. Growth recovered between 1998 and 2000 due to the good performance of agriculture, exports and manufacturing. The fall in 2000–01 and 2002–03 resulted from weak monsoon and a severe drought. Recovery in agriculture, buoyant manufacturing activity, a sharp rise in exports, and strong investment sustained an impressive acceleration in GDP growth from 2003–04 onwards.

In the years after 2003-04, the high growth rate was underpinned by an improvement in savings and investment rates. The turnaround was caused by improvements in mainly the public and corporate sector savings. In the long run, growth in savings and investment, supplemented by substantial growth in bank credit, propelled India's growth. There was a high correlation between domestic savings and investment; a substantial part of investment was supported by domestic savings rather than foreign investment. If savings was key to the acceleration, the improvement between 2003-04 and 2007-08 came from a number of structural changes. The rule-based fiscal consolidation programme (see Chapter 6) together with high growth delivered a steady increase in the tax-GDP ratio and improvement in savings of the government sector. The process enabled a narrowing of the public sector savings-investment gap and release of resources for the private sector. Financial restructuring of the corporate sector and reduction in the overall debt-equity ratio had a significant impact on the profitability of the corporate sector and its savings. Traditionally, household savings was high in India. Their contribution to overall savings remained steady during the 2000s.

Another major driver of the growth process was improved level of productivity reflected in the stable and low incremental capital—output ratio. While studies show that both industry and services recorded productivity gains, such gains were more pronounced in respect of the services sector. Productivity gains in industry and services emanated from increased use of technology, reorientation of processes, increased capacity utilisation and continued restructuring of the corporate sector.<sup>14</sup>

# Structural Change

India's growth experience was very different from the East Asian countries. The East Asian growth model consisted of an export-oriented strategy reliant on investment in manufacturing capacity, especially in labour-intensive industry and infrastructure. Over time, the labour force became more skilled, shifting exports to high-end electronics and automobiles. The services sector became an independent driver of growth at a much later stage. Japan was the first country to adopt this model, followed by the so-called Asian Tigers and China.

Manufacturing played a much smaller role in Indian growth (Tables 2.4 and 2.5). The contribution of agriculture and allied activities came down from an average of 28.9 per cent during 1986–87 to 1996–97 to an average of 20.8 per cent during the reference period (1997–98 to 2007–08). Its share in 2007–08 was as low as 16.8 per cent. The share of the industrial sector, and within that distribution among mining and quarrying, and manufacturing, changed little. The contribution of the services sector, on the other hand, improved from an average of 44 per cent during 1986–87 to 1996–97 to 51.6 per cent in the next eleven years. Indian growth since the mid-1980s did involve the expansion of labour-intensive industry, such as clothing, jewellery and leather, but the country was also biased towards skill-intensive production, which became more pronounced after liberalisation. India's exports, for example, included automobile parts and pharmaceuticals.

The most dramatic impact of the opening up occurred in skilled services such as software and back office outsourcing operations. The resultant innovations in financial services played a significant role in money and capital market operations, as we shall see. They also contributed to the development of new products and activities in media, leisure, recreation and entertainment industries as well as to the circulation of knowledge, information and knowhow. India's share of the global IT market accounted for 4 per cent overall in 2007, but in the area of global outsourcing, two-thirds of the world market in ITeS and engineering services and 38–42 per cent in business process outsourcing involved India. The so-called non-tradable outputs of the services sector had, in fact, become internationally tradable commodities.

One explanation for this feature of India's development was that the country was relatively capital-scarce. The savings rate was relatively low and the real interest rates high. The banking sector clean-up of the late 1990s and tight monetary policy resulted in low credit flow to the industry. Further, the

reforms did not completely get rid of the regulations on industry. Agriculture remained burdened by state procurement monopolies and restrictions on internal trade. The service sector was considered largely incidental and was not brought under the same tight regulation (also see Chapter 4). When the reforms began, the services sector was in the best position to take advantage of the situation. To this, of course, we have to add a comparative advantage that India had. Unlike other Asian countries, higher education, including technical education, found a relatively high priority in India from 1950 to 1980, even as the record of primary and secondary education was disappointing in India.

Table 2.4 Sectoral Shares in GDP (at 2004–05 Constant Prices)

(per cent)

Year	Agriculture 2 and Allied Activities	Agriculture	Industry (including Construction)	O	Manufacturing	Services
1997–98	24.5	20.6	27.9	3.2	15.9	47.6
1998–99	24.4	20.7	27.3	3.1	15.4	48.3
1999–2000	23.2	19.7	26.8	3.0	15.0	50.0
2000-01	22.3	18.7	27.3	3.0	15.5	50.5
2001-02	22.4	18.9	26.5	2.9	15.0	51.1
2002-03	20.1	16.7	27.4	3.0	15.4	52.5
2003-04	20.3	17.2	27.2	2.8	15.2	52.4
2004–05	19.0	16.0	27.9	2.9	15.3	53.0
2005-06	18.3	15.5	28.0	2.6	15.3	53.7
2006-07	17.4	14.7	28.7	2.6	16.0	54.0
2007-08	16.8	14.3	28.7	2.5	16.1	54.5
Average for 1997–98 to 2007–08	3 20.8	17.5	27.6	2.9	15.5	51.6
Average for 1997–98 to 2002–03	3 22.8	19.2	27.2	3.0	15.4	50.0
Average for 2003–04 to 2007–08	18.4	15.5	28.1	2.7	15.6	53.5
Average for 1986–87 to 1996–97	7 28.9	24.3	27.2	3.3	15.1	44.0

*Source*: Summary of macroeconomic aggregates (Base: 2004–05), Ministry of Statistics and Programme Implementation, Government of India (https://www.mospi.gov.in/web/mospi/download-tables-data/-/reports/view/templateOne/16701?q=TBDCAT).

Because of these features, including persistent barriers to integration with the world and a relatively small share of manufacturing in GDP, India's economy was somewhat insulated from the East Asian crisis. The corporate sector emerged from the slowdown stronger than before.

Table 2.5 shows that in the last five years of the reference period, manufacturing grew faster than before. The report of the Committee on Financial Sector Assessment (CFSA, 2009)<sup>16</sup> acknowledged that the acceleration was enabled by a surge in private sector investment and productivity growth. The policy environment helped entrepreneurial activity. The corporate tax rate was steadily reduced from 45 per cent in 1992–93 to 30 per cent by 2005–06 and was kept stable thereafter. The peak rate of customs duty on non-agricultural goods was reduced gradually from 150 per cent in 1991–92 to 10 per cent in 2007–08, which encouraged the import of machinery.

Further, debt servicing cost fell as the debt–equity ratio for public limited companies showed a generally declining trend from 63 per cent in 2003–04 to about 50 per cent in 2006–07. In private companies, the ratio showed an increasing trend, but it was lower than that in the public sector. The profitability of the Indian companies, measured by return on equity, was healthy and increased during the period under review. The low debt–equity ratio pointed at higher internal accrual and buoyancy in the capital market.

Until 1991, the corporate sector in India encountered several constraints on its financing choices. The CCI controlled access to the equity market. Long-term debt was largely under the purview of state-owned development banks, which, either through direct lending or through refinancing arrangements, virtually monopolised the supply of debt finance to corporates. The economic reforms, among other changes, freed capital markets and allowed entry of foreign investors, which brought new financing and ownership opportunities and raised the volume of new equity issues.

Profits after tax (PAT) recorded annual average growth of around 47 per cent per annum over a four-year period that ended in 2006–07. Profit margins recorded large gains while the interest burden witnessed a decline. In fact, the ratio of interest expenditure to sales revenues fell from around 6 per cent in the 1990s to about 2 per cent in 2007, thereby contributing greatly to the enhanced profit growth. The PAT to net worth ratio, after declining from 14.4 per cent in 1995–96 to 5.1 per cent in 2001–02, increased to 16.6 per cent 2005–06. The share of retained profits in PAT increased from 30.9 per cent in 2001–02 to 73.6 per cent in 2005–06. The improved corporate financial performance

resulted in doubling of the private corporate sector savings rate (from 3.9 per cent in 2002–03 to 7.8 per cent in 2006–07 and further to 9.4 per cent in 2007–08), which also contributed to the pick-up in the overall savings rate.

The Reserve Bank had been publishing special articles on the finances of non-government and non-financial public limited companies (implicitly covering private corporate sector in industry, mining and services) annually, based on their audited accounts. The number covered during 1990–91 to 2007–08 increased from 1,802 to 3,114, most of the growth occurring after 1999–2000. But for two intervening years, 1991–92 and 1996–97, the coverage of companies showed an upward trend, signifying that the sector as a whole was growing in size.

Table 2.5 Growth in Index of Industrial Production

(per cent)

Year	General	Manufacturing	Mining	Electricity	Infrastructure*
1997–98	6.7	6.7	6.9	6.6	5.7
1998–99	4.1	4.4	-0.8	6.5	2.8
1999–2000	6.7	7.1	1.0	7.3	9.1
2000-01	5.0	5.3	2.8	4.0	5.1
2001-02	2.7	2.9	1.2	3.1	3.2
2002-03	5.7	6.0	5.8	3.2	5.0
2003-04	7.0	7.4	5.2	5.1	6.1
2004-05	11.7	13.2	4.4	5.2	5.8
2005-06	8.6	10.3	2.3	5.2	3.9
2006-07	12.9	15.0	5.2	7.3	8.4
2007-08	15.5	18.4	4.6	6.3	5.2
Average for 1997–98 to 2007–08	7.9	8.8	3.5	5.4	5.5
Average for 1997–98 to 2002–03	5.1	5.4	2.8	5.1	5.2
Average for 2003–04 to 2007–08	11.2	12.8	4.3	5.8	5.9
Average for 1986–87 to 1996–97	7.2	7.4	4.6	8.0	6.7

Source: RBI, Database on Indian Economy (https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications).

*Note*: \* Relates to the combined index of eight core industries (coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity).

Specific details on the corporate turnaround can be found in a study done in 2009.17 This analysis of the performance of companies focused on three aspects: overall performance in terms of growth in assets, sales, income and expenditure; solvency and liquidity; and profitability and other efficiency parameters. The study found that both the total value of production and assets increased at a faster rate from about 2002-03. The total value of production increased at the rate of 18.6 per cent during 2002-03 to 2007-08 compared with 7.2 per cent in the previous five-year period, and the value of total assets increased faster than the value of production. This lends support to the hypothesis that the capital intensity of firms increased in the period of expansion. The growth rate in income, which had fallen somewhat earlier, dramatically improved in 2002-07. So did the value of production and income from interest and dividend. There was evidence that the companies diversified their activity into investments, possibly because of the cash surpluses that they enjoyed. Investments as a proportion of total assets increased from 6.6 per cent in 1997-2002 to 13.1 per cent in 2002-07. As for solvency and liquidity, borrowings as a percentage of total liabilities fell in 2002-07 and the current ratio improved. Finally, on efficiency and related aspects, the study found improvements in the trend in gross profits, profit before tax, dividends, retained earnings and inventory management. Further, both import and export intensities increased.

Another study showed that from 2000-01 to 2008-09, at the firm level, firm size, dividend payout ratio, the effective cost of borrowing, cash flow ratio and growth in the value of production were significant in determining corporate investment decisions. 18 At the macro level, capital market developments and real effective exchange rate influenced corporate investment decisions whereas inflation and non-food credit growth were not significant in predicting investment decisions. Using the broad classification of sources of funds into internal and external, and comparing their constituents' share in total sources of funds, the study showed that internal sources of funds contributed on an average a little more than one-third of the total sources of funds during the 1980s and the 1990s. Although firms relied more on the internal source of finance during 2000-01 to 2004-05, their reliance on external finance was increasing since 2005-06. During 2008-09, external sources contributed more than two-thirds of the total sources of funds. The rise in the share of external funds in total funds was largely due to borrowings in the 1980s, and borrowings along with fresh issues of capital in the 1990s. During the early 2000s, the reliance on

borrowings showed first a fall and then a rise. The lower interest rate, the study concludes, helped in higher fixed capital formation in the corporate sector.

How was the RBI involved in this process of macroeconomic transformation? Let us start with the money supply.

# Money Supply

There was a large expansion in the money supply and bank credit during the reference period. While the average annual growth in money supply for the reference period as a whole was flat at 17.3 per cent, which was by no means low when compared to the previous eleven years (17.4 per cent), the last three years of the reference period saw money supply exceed 21 per cent. Bank credit drove this trend in the last six years (Table 2.6).

Reserve money increased at an average annual rate of 14.1 per cent during 1996–97 to 2007–08. There was a substantial shift in sources of reserve money between these periods. The two major contributing factors to reserve money growth are net Reserve Bank credit to the government and net foreign exchange assets with the Reserve Bank. Compared to earlier periods, foreign exchange assets saw higher growth. This is reflected in the share of domestic and foreign assets in the Reserve Bank balance sheet. The Bank had to absorb excess foreign capital flows to maintain external competitiveness of the economy, avoiding real appreciation of the rupee and, at the same time, contain the monetary impact to rein in inflation, which was nearing double digits.

## Prices

The GDP growth rate was very high in the last five years of the reference period. On several occasions, the Reserve Bank raised the issue of 'overheating' of the economy. Though the average wholesale price index (WPI) inflation came down to 5.2 per cent from the previous eleven-year period (8.8 per cent), this picture conceals an increase in inflationary pressures in the last two years of the period, 2006–07 and 2007–08. The sign of overheating was emphasised by Governor Reddy in his policy statements during these years.

Table 2.6 Money Supply, Bank Credit and Inflation Rates

(per cent)

Year	$M_{_{\it 3}}^{\ *}$	Bank	Inflation Rate					
		Credit*	Wholesale price index (WPI)	Consumer price index for industrial workers (CPI-IW)		Consumer price index for agricultural labourers (CPI-AL)		
1997–98	18.0	16.4	4.3	8.3	7.5	3.8		
1998–99	19.4	13.8	5.4	8.9	7.5	8.8		
1999–2000	14.6	18.2	5.6	4.8	3.5	3.4		
2000-01	16.8	17.3	6.4	2.5	0.0	-2.0		
2001-02	14.1	15.3	1.8	5.2	3.6	3.0		
2002-03	14.7	23.7	6.0	4.1	3.7	4.9		
2003-04	16.7	15.3	4.8	3.5	3.1	2.5		
2004–05	12.0	30.9	5.3	4.2	1.6	2.4		
2005-06	21.1	30.8	3.9	4.9	4.9	5.3		
2006-07	21.7	28.1	6.6	6.7	12.2	9.5		
2007-08	21.4	22.3	7.5	7.9	9.3	7.9		
Average for 1997–98 to 2007–08	17.3	21.1	5.2	5.5	5.2	4.5		
Average for 1997–98 to 2002–03	16.3	17.5	4.9	5.6	4.3	3.7		
Average for 2003–04 to 2007–08	18.6	25.5	5.6	5.4	6.2	5.5		
Average for 1986–87 to 1996–97	17.4	15.9	8.8	9.5	10.0	9.9		

Source: WPI: Office of the Economic Advisor, Department for Promotion of Industry and Internal Trade, Government of India; CPI-IW: Labour Bureau, Ministry of Labour and Employment, GOI; CPI-AL: RBI, Database on Indian Economy.

Notes: \* Per cent of GDP.

Inflation rates represent point-to-point inflation for March of respective financial years.

Was there a growth-inflation trade-off in India? Economists sometimes suggest a prospect of a growth-inflation trade-off. A period of high growth tends to raise the inflation rate as well, which raises the issue of the role of monetary policy in managing the trade-off in the short run. Theoretical and empirical research suggests the presence of a country-specific 'threshold level' of inflation. Monetary policy may accommodate inflation up to the threshold level, but it must resist any increase in inflation beyond the threshold level because of the risk that further inflation could affect growth. From the time of the Chakravarty Committee<sup>19</sup> report (1985) until recently, several analyses were conducted and alternative measurements made on the trade-off between inflation and output.<sup>20</sup> A related concept and policy tool is 'potential output', or the level of output that is consistent with full capacity utilisation along with low and stable inflation. An assessment of the potential output is used to assess what is known as the 'output gap' - the difference between actual output and potential output. When this gap is negative, the economy is considered to be growing below potential, leaving scope for monetary easing.<sup>21</sup>

The acceleration in the GDP growth rate made these measures timely. Was the level of potential output rising in India? The CFSA (2009) examined the issue of sustaining high growth and concluded that 9 per cent growth in India during 2007–08 and the previous year could not be viewed as an unusual phenomenon. Indian economic growth had been largely enabled by a sustained increase in the level of domestic savings. The efficiency of resource use had also been high with a long-term incremental capital—output ratio of around 4, which was comparable to the record of the best countries in the world.

How is the Reserve Bank affected by economic growth? In principle, economic growth impacts the Reserve Bank balance sheet. A 1 percentage point change in nominal GDP impacts the balance sheet positively by roughly 0.53 percentage point over the period 1990–91 to 2007–08 (data compiled by EPW Research Foundation).<sup>22</sup> The size of the balance sheet expanded slowly at 13.1 per cent during the ten years ending 2002–03, and much more rapidly at 23.5 per cent during the next five years. This was an effect of higher growth rates. There was an unusual increase in the size of the balance sheet by 46 per cent during 2007–08, contributed essentially by

a large increase of 55 per cent in foreign currency assets on account of net purchase of US dollars from the market. $^{23}$ 

# Money and Financial Markets

Financial markets in India had seen major developments since the financial sector reforms initiated in the early 1990s. As the CFSA observed, in keeping with the evolving global financial developments and the ongoing Indian reforms, financial markets had emerged as the major channel of resource mobilisation during the reference period. The two decades since 1990-91 had seen tremendous growth in Indian equity markets. There were big changes in the market and settlement infrastructure, and major strides had been taken in areas of risk management, especially after the SEBI was empowered as the market regulator. The turnover in both cash and derivatives markets, along with market capitalisation and returns from stock markets, increased considerably. The Indian foreign exchange market volumes showed the fastest growth between 1998 and 2007 among the countries surveyed by the BIS. The total annual turnover increased from US\$1.3 trillion during 1997-98 to US\$12.3 trillion during 2007-08. The daily average turnover increased from about US\$5 billion during 1997-98 to US\$49 billion during 2007-08. The low and stable bid-ask spread of the INR/USD market was an indicator of the deep liquidity and efficiency of the market.

Given the important strategic intervention role that the government was required to play, the government securities market was one of the most important segment of the financial market. The market also served as an important transmission channel for monetary policy. Consequent to the various steps taken to develop the government securities market, there had been tremendous growth in both volume and liquidity in this segment. The outstanding stock of marketable government securities as a percentage of GDP increased from 14.3 per cent to 28.3 per cent during 1995–96 to 2007–08 (CFSA, 2009). Trade associations like the Fixed Income Money Market Derivatives Association of India (FIMMDA) also played a crucial role in the development of the government securities market.

The major steps taken for the development of the government securities market included diversification of the investor base to non-banks and retail segments, availability of varied hedging instruments for effective mitigation of interest rate risk across a diverse set of market participants, gradual increase

in the number of trading days for short-selling in government securities along with appropriate borrowing/lending mechanisms in government securities and capacity building to study the suitability of a derivative product and its appropriateness.

The important components of the money market in India were the interbank call (overnight) money, market repo, collateralised borrowing and lending obligation (CBLO), commercial paper, certificate of deposit and term money market. Treasury bills constitute the main instrument of short-term borrowing by the government. Historically, the call money market was the core of the money market in India. However, the collateralised segments, that is, market repo and CBLO, came into prominence in later years of the reference period. The market continued to be liquid. A better trading and settlement infrastructure, together with the introduction of financial market reforms, led to a decline in money market volatility. In the derivatives segment, the swap market (especially overnight index swaps) was the active segment and used by banks, as well as other entities, to manage their interest rate risk more than any other instrument.

Interest rate deregulation had made financial market operations more efficient, but it had also exposed participants to increased risks. Interest rate derivative products could be an effective risk depressor in this regard. Rupee derivatives in India were introduced in July 1999, when the Reserve Bank permitted banks, financial institutions and primary dealers to undertake interest rate swaps and forward rate agreements.

At the close of the reference period, when several money markets in developed countries experienced serious difficulties, the Indian money market continued to function normally. However, the inability of market participants to take a medium- to a long-term perspective on interest rates and liquidity, coupled with the absence of a credible long-term benchmark interest rate, was a major hurdle for further market development. The expansion of the corporate bond market could have been a source of long-term finance for corporates. But the development of this market suffered from a lack of interest from buyers, the absence of pricing of spreads against the benchmark, and a flat yield curve. It required further regulatory and legislative reforms for its development.

# Fiscal Developments

A positive development during this period was the overall improvement in fiscal indicators. But fiscal consolidation was a slow process (and it was

halted in the wake of the 2007–08 global financial crisis). The fiscal position of the central and state governments in the face of increasing social and economic responsibilities had been under considerable stress until the early 2000s. Though the Fiscal Responsibility and Budget Management (FRBM) Act was passed in 2003, it was not until 2007–08 that the fiscal deficit level was brought down to less than 3 per cent of GDP in the case of the central government. The deficit levels were much higher at over 5 per cent until 2002–03 (Table 2.7). The IMF had been continuously cautioning on this issue, and the Reserve Bank in its policy statements commented regularly on how such deficits complicated monetary management. The combined deficit of the central and state Governments remained well above 6 per cent until 2005–06 but in the last two years of the reference period, it was brought down to 5.1 per cent and 4.0 per cent, respectively.

The total liabilities to GDP ratio worsened from 59.6 per cent to an average of 61.3 per cent in the case of the central government and from 69.1 per cent to 75.4 per cent in the case of the combined level for the centre and the states (between 1986–96 and 1997–2007). The continued high fiscal deficit position and higher levels of market borrowings were the two major reasons for the Reserve Bank to not support the separation of debt management function from monetary management – which was recommended by several committees – during the period.

The CFSA noted that fiscal consolidation was a prerequisite for sustained growth. High fiscal deficits would crowd out private investments. Depending on how they were financed, fiscal deficits could have an adverse impact on the economy through movements in inflation, interest rates and the exchange rate. Some degree of fiscal adjustment or correction was achieved by a reduction in public investment during the reference period.

Despite awareness of the risks, progress was mixed. Public sector savings continued to deteriorate during the 1990s and turned negative over the five-year period 1998–2003 owing to deterioration in savings of the government. There was some reduction in the centre's fiscal deficits up to 1996–97. The process was reversed over the next few years under the impact of industrial slowdown and the Fifth Pay Commission<sup>24</sup> award. Fiscal consolidation, which was envisaged to be achieved through revenue enhancement and curtailment in current expenditure growth, was brought about instead through compression of capital expenditure. A major problem with reforming public finances was

fall in the gross tax–GDP ratio of the centre from 10 per cent in 1991–92 to 9.1 per cent in 1996–97 and further to 7.9 per cent in 2001–02, a fall mainly attributable to a reduction in tax rates.

Table 2.7 Major Fiscal Indicators

(per cent of GDP)

Year	Central Government				Combined Central and State Governments		
	Total liabilities	Gross fiscal deficit	Revenue deficit	Monetised deficit*	Gross fiscal deficit	Revenue deficit	Total liabilities
1997–98	56.2	5.7	3.0	0.8	7.0	4.0	66.3
1998–99	56.1	6.3	3.7	0.7	8.7	6.1	67.1
1999–2000	56.8	5.2	3.3	-0.3	9.1	6.0	70.5
2000-01	59.4	5.5	3.9	0.3	9.2	6.4	73.7
2001-02	63.4	6.0	4.3	-0.2	9.6	6.8	78.8
2002-03	66.9	5.7	4.3	-1.1	9.3	6.4	82.9
2003-04	66.0	4.3	3.5	-2.7	8.3	5.6	83.2
2004–05	65.5	3.9	2.4	-1.9	7.2	3.5	82.1
2005-06	63.9	4.0	2.5	0.8	6.5	2.7	79.1
2006-07	61.4	3.3	1.9	-0.1	5.1	1.3	74.7
2007-08	58.9	2.5	1.1	-2.3	4.0	0.2	71.4
Average for 1997–98 to 2007–08	61.3	4.8	3.1	-0.6	7.6	4.5	75.4
Average for 1997–98 to 2002–03	59.8	5.7	3.7	0.0	8.8	6.0	73.2
Average for 2003–04 to 2007–08	63.1	3.6	2.3	-1.2	6.2	2.7	78.1
Average for 1986–87 to 1996–97	59.6	6.3	2.6	1.3	7.7	3.2	69.1

Source: RBI, Database on Indian Economy (https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications).

*Note*: \* Refers to net RBI credit to the central government, which includes both primary and secondary market investments by the RBI.

In view of the deterioration in fiscal deficits over 1997–98 to 2002–03 and rising public debt, a renewed emphasis was laid on improving the health of the public finances. The FRBM Act, 2003, and similar fiscal responsibility legislation at the state level were a means to achieve this aim. The idea behind the legislation was to implement rule-based fiscal policies at the centre and the states. The move paid off. Furthermore, the growth of revenues helped improve the situation from 2003–04 onwards. The strategy to raise revenue involved keeping tax rates moderate and broadening the tax by introducing service tax, removing exemptions, and making the tax administration more efficient. Reflecting these measures, the centre's tax–GDP ratio rose from 8.8 per cent in 2002–03 to 11.8 per cent in 2007–08.

On the expenditure front, while the total expenditure of the centre declined from 16.3 per cent of GDP in 2002–03 to 14.3 per cent in 2007–08, the capital outlay rose from 1.2 per cent to 2.1 per cent of GDP. The movement in key deficit indicators reflected the progress made in fiscal consolidation. The fiscal deficit of the centre and the states taken together had declined from 9.3 per cent of GDP in 2002–03 to 4 per cent in 2007–08, led by a reduction in revenue deficit from 6.4 per cent of GDP to 0.2 per cent.

States benefited greatly from the introduction of rule-based fiscal consolidation. The role of the Reserve Bank was especially significant in achieving this. The Bank did much more than perform its mandated roles as a banker and debt manager of the state governments; it also worked to improve market access for resources, introduce innovations and transparency, and facilitate the introduction of FRBM Acts by the states. The Bank enabled conditions for the states to switch over to a full-fledged auction system for market borrowings. It also helped states in swapping high-cost debt with low-cost debt (also see Chapter 7).

## External Sector

Increasing openness was a defining feature of the process of change during the years of interest in the present study. Trade to GDP ratio increased from 21 per cent in 1997–98 to 34 per cent in 2007–08 (Table 2.8). There was substantial growth in the contribution of the net invisibles to GDP, rising, on average, from 1 per cent (1986–87 to 1996–97) to 3.7 per cent in the reference period.

The inflow provided enormous support to the current account, mitigating in large measure the adverse effect of the deficit in the trade account. This was possible because of the rise in service exports and large inflows by way of remittances from expatriates during this period.

Table 2.8 Balance of Payments Indicators

(per cent)

Year	Exports to GDP	Imports to GDP	Invisibles (Net) to GDP	Current Account Balance to GDP	Import Cover of Foreign Exchange Reserves (no. of months)
1997–98	8.4	12.1	2.3	(-) 1.3	6.9
1998–99	8.0	11.1	2.1	(-) 0.9	8.2
1999–2000	8.0	11.9	2.8	(-) 1.0	8.2
2000-01	9.5	12.2	2.1	(-) 0.5	8.8
2001-02	9.1	11.4	3.0	0.7	11.5
2002-03	10.3	12.3	3.2	1.2	14.2
2003-04	10.7	12.9	4.5	2.3	16.9
2004–05	11.8	16.5	4.3	(-) 0.4	14.3
2005-06	12.6	18.8	5.0	(-) 1.2	11.6
2006-07	13.6	20.1	5.5	(-) 1.0	12.5
2007-08	13.4	20.8	6.1	(-) 1.3	14.4
Average for 1997–98 to 2007–08	10.5	14.5	3.7	(-) 0.3	11.6
Average for 1997–98 to 2002–03	8.9	11.8	2.6	(-)0.3	9.6
Average for 2003–04 to 2007–08	12.4	17.8	5.1	(-) 0.3	13.9
Average for 1986–87 to 1996–97	6.5	9.1	1.0	(-) 1.6	5.0

Source: RBI, Database on Indian Economy (https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications).

Foreign investment flows into India, comprising foreign direct investment (FDI) and foreign portfolio investment (FPI), rose during the 1990s. Growing capital flows made it possible for the Bank to follow a policy of building up foreign exchange reserves as insurance against adverse external shocks. The

import cover of foreign exchange reserves in terms of the number of months of imports improved substantially. The growth of inflows accelerated in the second half of the period. Net FDI flows and capital issues under American depository receipts (ADRs) and global depository receipts (GDRs) continued to support capital inflows.

While the capital inflows eased the balance of payments situation, they posed dilemmas for the conduct of monetary policy as also for financial stability. Containing fluctuations in the exchange rate and the task of maintaining orderly conditions in the foreign exchange market became difficult to achieve. More specifically, if capital inflows outstripped the demand for foreign exchange, the appreciation of the domestic currency often necessitated interventions by the central bank to drain off the excess supply of foreign currency. In doing so, the accretion to official reserves implied an immediate expansion in primary money supply with consequences for maintaining price stability. In this context, judgements had to be made whether capital flows were of an enduring nature or temporary, which were difficult to make ex ante. The judgement about excessive volatility would depend not merely on the quantity of the flow but, to some extent, on the quality in terms of components of the capital flow.

India's approach to the capital account had consistently made a distinction between debt and equity, with greater preference for liberalisation of equity markets vis-à-vis debt markets. Equity markets provided risk capital. In view of higher domestic nominal interest rates, open debt markets could attract large capital flows and further add to sterilisation costs. Thus, debt flows into India were subject to ceilings.

The CFSA recognised the role of capital account liberalisation in promoting growth among developing countries but recognised that this should be done strategically to help the evolution of Indian financial markets in alignment with improvements in macroeconomic management. Among the more important areas of improvement were: fiscal consolidation, sustained reduction in inflation to international levels, strengthening the banking system, diversifying financial intermediation through both banks and non-banks, and strengthening the regulation of financial markets.

## Conclusion

India witnessed markedly robust economic expansion during the reference period, thanks to economic reforms initiated in the mid-1980s, which were

further strengthened since 1991, and the increasing integration of the Indian economy with the world economy. Most of the economic parameters showed positive and accelerated improvements during the reference period, particularly during the latter half, compared to the previous eleven years – 1986–87 to 1996–97. While there were political uncertainties and frequent changes of governments, the focus on reforms was not lost. There were many strengths of the Indian economy but towards the end of the reference period, there were also many challenges that needed to be addressed. The Reserve Bank had to function and adapt its policies and operations to these macro developments.

## Notes

- 1. Governor Ben Bernanke's speech at the Federal Reserve Board, 2004, available at https://www.federalreserve.gov/boarddocs/speeches/2004/20040220/default. htm.
- International Monetary Fund, World Economic Outlook (Washington DC: IMF, 1999). Also see Mary M. Shirley, 'The What, Why and How of Privatization: A World Bank Perspective', Fordham Law Review 60, no. 6 (1992): S23–S36.
- 3. On the Asian crisis, a large literature exists. A useful contemporary analysis can be found in Steven Radelet, Jeffrey D. Sachs, Richard N. Cooper and Barry P. Bosworth, 'The East Asian Financial Crisis: Diagnosis, Remedies, Prospects', Brookings Papers on Economic Activity, no. 1 (1998): 1–90.
- 4. International Monetary Fund, World Economic Outlook, April 1998 to April 2008 (Washington DC: IMF, 2009).
- 5. Ibid.
- 6. India was one among the twelve pilot countries to volunteer for financial sector assessment.
- 7. Ashok Chawla was Secretary, Department of Economic Affairs, from 6 September 2008; D. Subbarao was Finance Secretary from 16 July 2007 to 5 September 2008; and Ashok Jha was Finance Secretary from 13 September 2006 to 15 July 2007. The composition of the committee may be seen here: https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CFSA1.pdf.
- 8. IMF sources reported a 31 per cent increase of average petroleum spot price during 2004 and a further increase by 50 per cent in 2005.
- 9. M. Ayhan Kose and Eswar Prasad, *Emerging Markets: Resilience and Growth amid Global Turmoil* (Washington DC: Brookings Institution Press, 2010). Net exporters of capital refer to countries running 'current account surplus'. China had been a regular capital exporter whereas India was a capital exporter during three consecutive years from 2001–02 to 2003–04.

- 10. The scholarship on India's growth turnaround since the 1980s, the contribution of the economic reforms to the process, and the ideological debates over liberalisation is now very large. A selective bibliography should include Ashok Kotwal, Bharat Ramaswami and Wilima Wadhwa, 'Economic Liberalization and Indian Economic Growth: What's the Evidence?' *Journal of Economic Literature* 49, no. 4 (2011): 1152–99; Arvind Panagariya, *India: The Emerging Giant* (Oxford and New York: Oxford University Press, 2008); Kunal Sen, 'Why Did the Elephant Start to Trot? India's Growth Acceleration Re-examined', *Economic and Political Weekly* 42, no. 43 (2007): 37–47; Dani Rodrik and Arvind Subramanian, 'From "Hindu Growth" to Productivity Surge: The Mystery of the Indian Growth Transition', IMF Staff Papers 52, no. 2 (2005): 193–22; and Montek S. Ahluwalia, 'Economic Reforms in India since 1991: Has Gradualism Worked?' *The Journal of Economic Perspectives* 16, no. 3 (2002): 67–88.
- 11. As per the revised national accounts series with base year 2011–12, the growth averaged lower at 7.9 per cent.
- 12. The Y2K issue refers to the problems of digitally storing and recording calendar data for years after 2000.
- 13. For an example of a work that stresses attitudes more, see Rodrik and Subramanian, 'From "Hindu Growth" to Productivity Surge'; for an example of a work that stresses political alliances and pro-business tilt, see Atul Kohli, 'Politics of Economic Growth in India, 1980–2005, Parts I and II', *Economic and Political Weekly* 41, nos 13–14 (2006): 1251–59 and 1361–70.
- 14. RBI, Annual Report, 2007-08, 2008.
- 15. Shujiro Urata, 'The Indian Economy: Growth, Challenges, and Regional Cooperation', in *Asia Research Report 2009* (Japan Center for Economic Research, 2010).
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- 17. K. Kanagasabapathy, *Post-Reform Performance of the Private Corporate Sector* (Mumbai: EPW Research Foundation, 2009).
- 18. Ramesh Jangili and Sharad Kumar, 'Determinants of Private Corporate Sector Investment in India', Reserve Bank of India Occasional Papers 31, no. 3 (2010): 67–89.
- 19. A committee headed by Professor Sukhamoy Chakravarty to review the working of the monetary system in India.
- 20. See, for example, Reserve Bank of India (2002), Report on Currency and Finance, Chapter 5, available at https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/25525.pdf; R. Kannan and Himanshu Joshi, 'Growth–Inflation Trade-off: Empirical Estimation of Threshold Rate of Inflation for India', Economic and Political Weekly 33, nos 42–43 (17–30 October 1998): 2724-

- 28; K. Mohaddes and M. Raissi, 'Does Inflation Slow Long-Run Growth in India?' IMF Working Paper No. WP/14/22, Washington DC, December 2014, available at https://www.imf.org/external/pubs/ft/wp/2014/wp14222. pdf; Deepak Mohanty, A. B. Chakraborty, Abhiman Das and Joice John, 'Inflation Threshold in India', RBI Working Paper Series (DEPR), 18/2011, October 2011.
- 21. For alternative estimates of potential output, and more discussion on the topic, see Rajiv Ranjan, Rajeev Jain and Sarat C. Dhal, 'India's Potential Economic Growth Measurement Issues and Policy Implications', *Economic and Political Weekly* 42, no. 17 (2007): 1563–72; Barendra Kumar Bhoi and Harendra Kumar Behera, 'India's Potential Output Revisited', RBI Working Paper Series (DEPR), 05/2016, April 2016.
- 22. Until 2019–20, the Reserve Bank's accounting year was from July to June. The span of the accounting year has been changed to April to March, in alignment with that of the government, with effect from 2021–22. In the process of transition, the accounting year ran from July to March for 2020–21.
- 23. RBI, Annual Report, 2007–08.
- 24. The Pay Commissions review the pay structure of civil and military establishments of the Government of India. Since 1947 until the present, seven Pay Commissions were formed. The Fifth Pay Commission (1996–2006) generated a controversy for the large pay rise it recommended.