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Macroeconomic developments and policies since 2000

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MACROECONOMIC DEVELOPMENTS AND POLICIES SINCE 2000

SHANKAR ACHARYA

MAY 2025

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Abstract

The first section provides a brief review of developments in key macroeconomic variables since 2000. These include the usual target variables of economic growth, inflation, external balance and employment as well as intermediate target variables of fiscal balance, savings and investment. Section II considers some of the major exogenous shocks experienced in the last 24 years and how well (or badly) India's policies coped with them. The shocks include the foreign capital surge of 2006-8, the global financial crisis (GFC) of 2008-9 and the Covid pandemic that hit India in 2020. Section III considers some of the key macro challenges that lie ahead. These include; the worsened international economic environment produced by undermining of the rules-based, liberal, world trading order by the first four months of second Trump administration in the US through steep tariffs on major trading partners (China, EU, Canada and Mexico) as well as higher tariffs on nearly all other trading nations; the need to raise India's aggregate investment, savings and exports through an array of economic policy reforms in foreign trade, factor markets, taxation and deregulation to raise the rate of economic growth from 6-6.5 percent to above 8 percent; and ensure a more employment-intensive pattern of development, while maintaining external and domestic macro balance.

Keywords: *India, Macroeconomic Policy, Economic Growth, Inflation, Employment, External Balance, Fiscal Deficits and Debt, Savings and Investment*

JEL classification: *E2, E6, F4, H3, H6*

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Macroeconomic Developments and Policies since 2000¹

Shankar Acharya

1. Introduction

The first section provides a brief review of developments in key macroeconomic variables since 2000. These include the usual target variables of economic growth, inflation, external balance and employment as well as intermediate target variables of fiscal balance, savings and investment. Section II considers some of the major exogenous shocks experienced in the last 24 years and how well (or badly) India's policies coped with them. The shocks include the foreign capital surge of 2006-8, the global financial crisis (GFC) of 2008-9 and the Covid pandemic that hit India in 2020. Section III considers some of the key macro challenges that lie ahead.

2 Macroeconomic Developments since 2000²

2.1 Economic Growth

The new century began with modest growth in GDP of 4.8 percent in 2001/2. The earlier reforms-spurred growth spurt of 6.6 percent per year in the period 1992-7 had faltered due to several factors including the headwinds from the East Asian financial crisis of 1997-98; initial uncertainties of multi-party coalitional governance in 1996-8; and a sustained deterioration in the consolidated fiscal deficit triggered mainly by the large pay increases of the Fifth Pay Commission.³ Growth dropped even lower to 3.8 percent in 2002/3 because of a steep, drought-induced fall in agricultural value-added of over 6 percent in that year (see Figure 1).

From 2003/4 to 2010/11 India enjoyed an unprecedented (and thus far unrivalled) 8-year economic boom, averaging 7.4 percent GDP growth, despite a marked but temporary slowdown in 2008/9 because of the Global Financial Crisis of that year (Rakesh Mohan correctly prefers to call it the North Atlantic Financial Crisis (NAFC)). Indeed, if one

omits 2008/9, GDP average growth was 8 percent for the other seven years. And for the shorter 5 year period 2003/4-2007/8 growth averaged 7.9 percent. Actually, according to the earlier national accounts series with base 2004/5, growth during this 8 year period averaged even higher at about 8.5 percent.⁴

What were some of the drivers of this remarkable economic boom? They included:

The unusually strong global economic expansion of 2002-2007 which boosted growth across the world through greater international trade, capital flows and international technology transfer.

An unprecedented surge in aggregate investment, propelled mainly by extraordinary growth of private corporate investment, which took the share of gross domestic investment in GDP from 26 percent in 2000/2001 to 39 percent in 2006/7, where it stayed till 2012/13, averaging nearly 40 percent for the full seven years (Figure 2).

The cumulative productivity enhancing effects of the economic reforms carried out during 1991-2004, especially during the Narasimha Rao government (1991-1996) and the Atal Bihari Vajpayee government (1998-2004).

A remarkably successful fiscal consolidation that brought the combined fiscal deficit down from 9.8 percent of GDP in 2001/2 to 4.1 percent in 2007/8. This consolidation, built on rapid growth of tax revenues at both central and state government levels and some restraint on expenditure, engendered a major improvement in public savings, a large increase in loanable funds for productive investment and significantly lower real interest rates.

The strong growth in exports of both goods and services which took their share of GDP from 13 percent in 2000-2002 to an average of 25 percent in 2011-14, with the goods share accounting for

1 I am indebted to Sanjana Shukla and Nency Agrawal for excellent research assistance. I am also grateful to V. Anantha Nageswaran for comments on an earlier draft.

2 For a detailed account of India's macroeconomic developments and policies in 2000-2008, see Acharya (2010)

3 For a comprehensive analysis of India's macroeconomic management in the 1990s, see Acharya (2002).

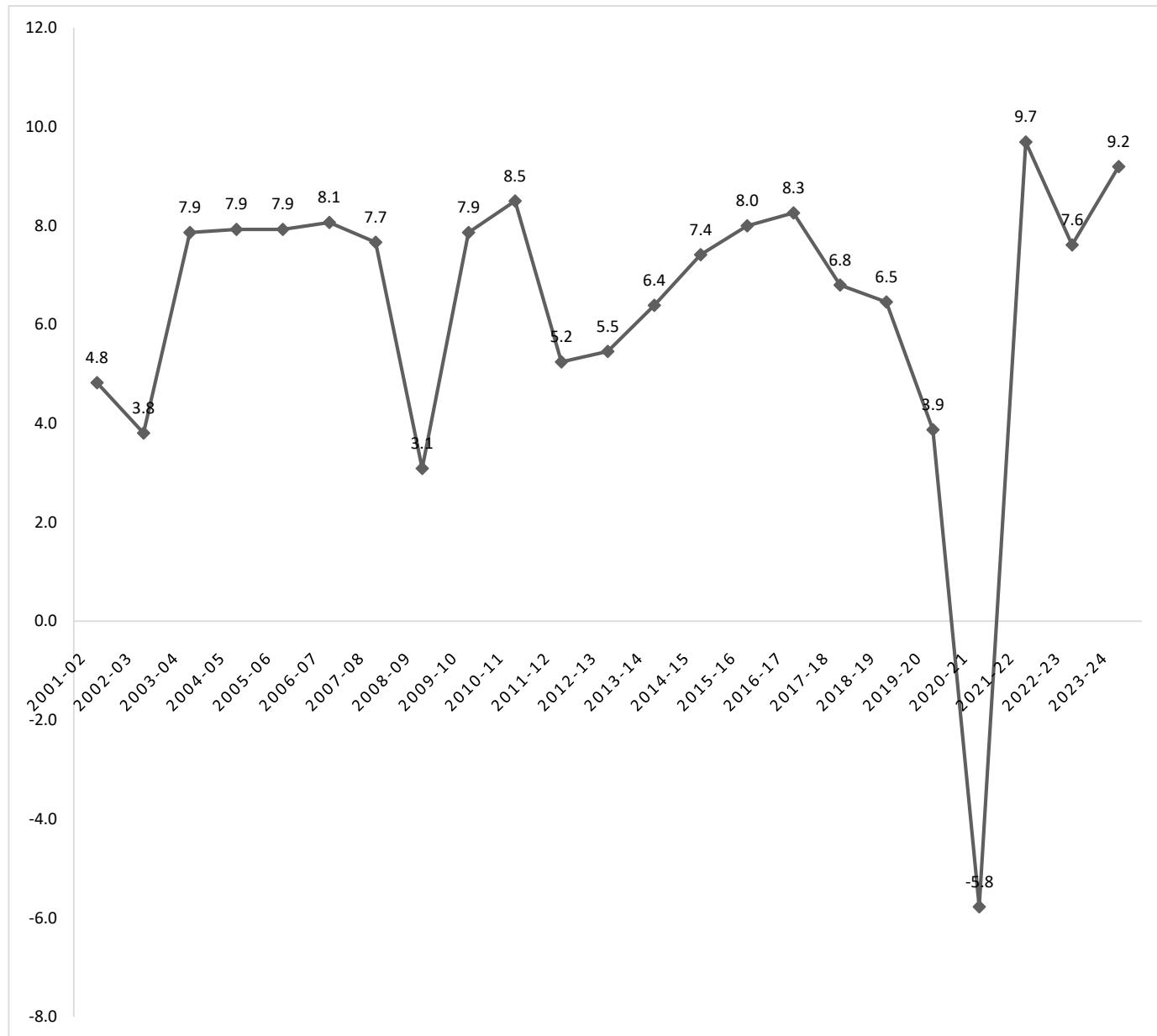
4 There is substantial skepticism about the quality of the current, 2011/12 base, national accounts series amongst analysts. See, for example, Subramanian (2019a and 2019b) for a comprehensive analysis.

17 percent of GDP and services for the remaining 8 percent (Figure 6)

A remarkable growth in software and IT enabled services coupled with a boom in domestic mobile telephony and financial services ensured that the modern service sector became a significant contributor to GDP and its growth in those years.

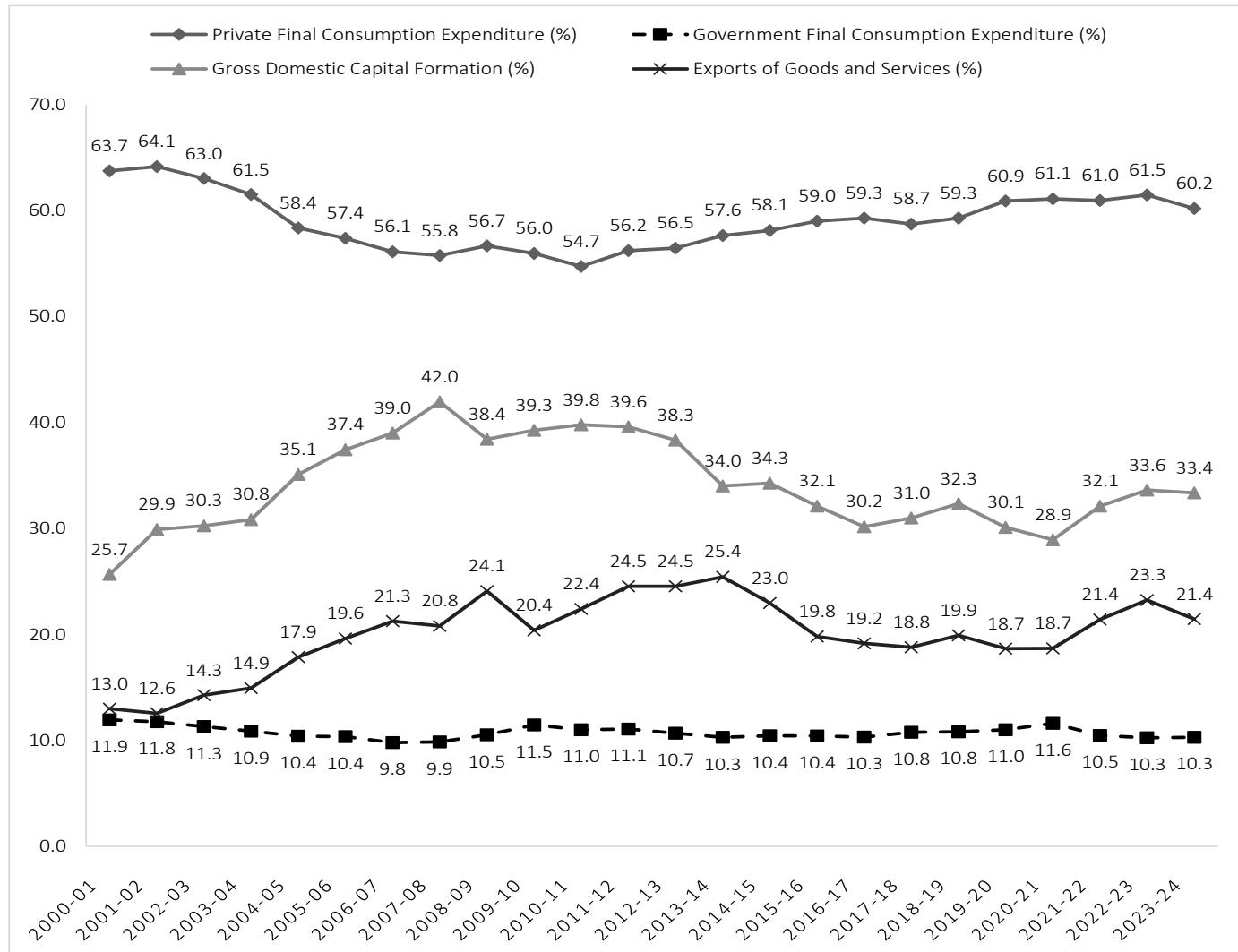
After 2010/11 GDP growth slowed significantly to 5-6 percent rates for the final three years of the UPA government headed by Manmohan Singh as investment slowed and the momentum of exports slackened. Investment was negatively affected by the revelation of several large scams which were sown in the boom period, including those related to coal and telecom sectors as well as the one associated with the Commonwealth Games.

Figure 1: Growth of GDP at Constant Market Prices (Base: 2011-12)



Source: Database of Indian Economy, RBI; Press Note, MOSPI released on 28th February, 2025

Figure 2: Share in GDP at current Market Prices (Expenditure Composition)



Source: Database of Indian Economy, RBI; Press Note, MOSPI released on 28th February, 2025

These put the government on the defensive and contributed to the so-called “policy paralysis”. The slowdown in exports was attributable partly to global factors such as the fall-out from NAFC and the European debt crisis of 2010-13. In addition, the significant appreciation of the real effective exchange rate of the rupee in this period and our failure to effectively plug into regional trade agreements and global value chains constrained our exports.

Growth recovered smartly in the first three years of the NDA government headed by Narendra Modi, rising to a peak of 8.3 percent in 2016/17 as general confidence was restored. However, the recovery was short-lived with GDP growth sliding, in the next three years, down to 3.9 percent in 2019-20. Among factors that contributed to this slowdown was the sudden demonetization of high value currency notes in November 2016, the financial stress associated with unwinding the “twin balance sheet” problem that had been spawned by the financial exuberance of the previous high growth period, and the somewhat complex and disruptive transition to the new Goods

and Services Tax (GST) which was introduced in July 2017. Covid and the associated lockdowns in 2020/21 led to an unprecedented decline in GDP by 5.8 percent. Fortunately, the recovery from this nadir was swift and strong, with GDP growth averaging above 8 percent in the subsequent three years 2021/22-2023/24, admittedly benefitted by the low base of GDP in 2020/21. However, the year 2024/25, may well be a crucial hinge year for the Indian economy as GDP growth slows significantly to 6-6.5 percent and the “Trade Wars” of Trump 2.0 take off from early 2025, ushering in prospects of slower growth of trade and output in the world and India in 2025 and beyond.

It is interesting to look at the sectoral and expenditure composition of GDP growth during the last two decades (Figure 3 and Tables 1 and 2). If we divide the last 20 years into four five-year periods, it is noteworthy that the Services sector (including construction) was the leading contributor to overall real growth of Gross Value Added (GVA) at basic prices (almost equivalent to the older concept of GDP at factor cost). Industry (and its main component,

Figure 3: Sectoral Composition in Gross Value Added (GVA) at Current Basic Prices



Source: Database of Indian Economy, RBI; Press Note, MOSPI released on 28th February 2025

Table 1: Share of Major Sectors in Gross Value Added (GVA) and their contribution to growth of GVA.

Sectoral Composition of Growth	Share of sectors in Gross Value Added at Current Basic Prices		Periodised Contribution to Growth Rates of GVA at Constant Basic Prices			
	2001-02 to 2003-04	2021-22 to 2023-24	2003-04 to 2008-09	2008-09 to 2013-14	2013-14 to 2018-19	2018-19 to 2023-24
	22.0	18.3	8.3	12.6	7.3	14.3
Agriculture, Forestry and Fishing (%)	22.6	19.4	26.6	19.4	25.2	17.2
Industry (%)	16.9	14.8	21.1	17.4	20.9	14.5
of which Manufacturing (%)	55.4	62.3	65.1	68.0	67.4	68.5
Services (%)						

Source: Database of Indian Economy, RBI; Press Note, MOSPI released on 28th February 2025

Table 2: Share of expenditure components in GDP and their contribution to growth of GDP

Expenditure Composition of growth	Share of expenditure components in GDP Current Market Prices		Periodised Contribution to Growth of GDP at Constant Market Prices			
	2001-02 to 2003-04	2021-22 to 2023-24	2003-04 to 2008-09	2008-09 to 2013-14	2013-14 to 2018-19	2018-19 to 2023-24
Private Final Consumption Expenditure (%)	62.9	60.9	50.1	54.6	54.7	56.2
Government Final Consumption Expenditure (%)	11.3	10.3	11.4	8.2	10.9	6.4
Gross Domestic Capital Formation (%)	30.3	33.0	57.2	35.9	36.3	40.9
Net Exports of Goods and Services (%)	-0.9	-2.8	-14.8	6.5	-6.2	-3.5
Memo Items						
Exports of Goods and Services (%)	13.9	22.0	46.5	30.9	10.6	25.0

Source: Database of Indian Economy, RBI; Press Note, MOSPI released on 28th February 2025

Manufacturing) was a significant contributor in two of the periods, 2003/4-2008/9 and 2013/14-2018/19, while Agriculture (including Forestry and Fishing) contributed below its share prevailing both in the base period, 2001/2-2003/4 and the end period 2021/2022-2023/24. While the declining share of

Agriculture in GVA over the two decades follows the normal pattern in economic development, it is quite worrisome that the share of Industry (and its main component Manufacturing) declined significantly between the base period and the end period. This was due to their slow growth in both the second

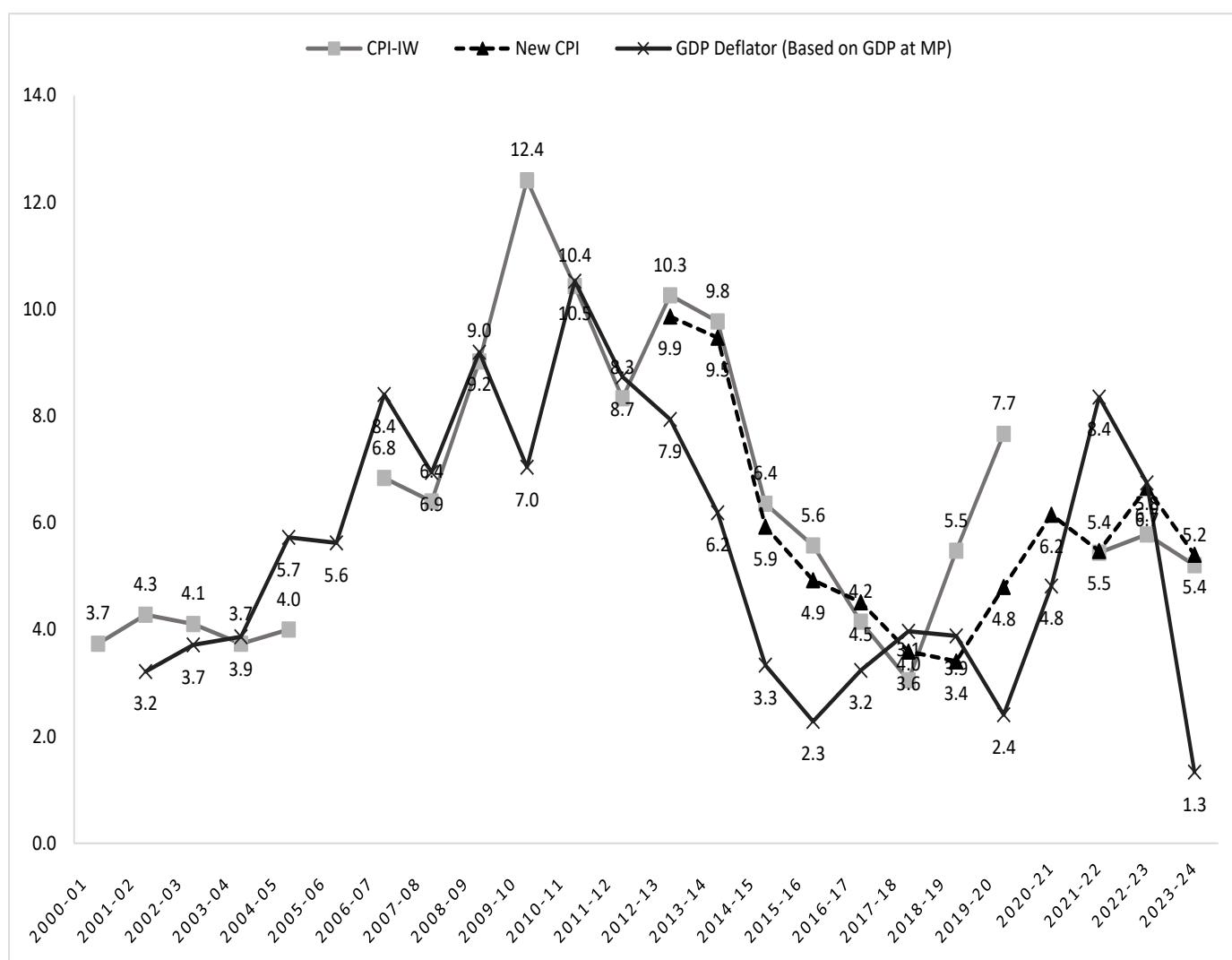
and last five-year periods, especially the latter. It is both striking and discouraging that the share of Manufacturing in GVA fell to 14.3 percent in 2023/24 compared to an average of 18.2 percent in the five years 2006/7-2010/11.

Turning to the composition of major expenditure components of GDP and their contribution to real GDP growth, what is striking is the massive contribution of Gross Domestic Capital Formation (that is, gross domestic investment) in the first five-year period, 2003/4-2008/9, accounting for over half the GDP growth in that period. It was a remarkable investment boom, the likes of which we have not seen in India either before or since.

2.2 Inflation

Since 2000/01, inflation has been volatile, ranging from 1-2 percent to above 10 percent. Much depends on which index of inflation is used to measure annual price changes. Figure 4 presents trajectories of three alternative broad-based price indices: the GDP deflator (implicit in national accounts data), the Consumer Price Index for Industrial Workers or CPI (IW) and the relatively new Consumer Price Index (CPI) with base 2012=100. In the era of formal inflation-targeting by the Reserve Bank (2016 onwards) the last of these three indices occupies centre stage.

Figure 4: Inflation



Source: Database of Indian Economy, RBI

Of course, ever since monetary policy was revived in the mid-1990s, following the lifting of interest rate caps by the RBI and the Government-RBI agreement on phasing out the old practice of issuing ad hoc Treasury Bills, the RBI has pursued multiple objectives of controlling inflation, supporting growth and economic activity, maintaining financial stability, exchange rate management and management of

the government's borrowing and debt. Since the amendment of the RBI Act in 2016 to accommodate formal inflation targeting, it could be argued that these targets (4 percent, with a tolerance band of 2-6 percent) have become the primary objective of the Monetary Policy Committee (MPC) of the RBI. But the RBI's actions clearly indicate that the other objectives still remain.

The record of inflation, as depicted in Figure 4, suggests that broadly-speaking, the three indices have moved together whenever the data are available (gaps in CPI IW indicate shifts to a new base year and the new CPI series only started in 2012). From 2000/01 to 2005/6 inflation was below 6 percent. After that it ratcheted up, driven by strong investment demand, a commodity price upsurge, the massive increase in the fiscal deficit in 2008/9 and broadly accommodative monetary policy, especially as the downdraft of the NAFC reached India. The annual increases in the CPI (IW) averaged 10 percent in the six years 2008/9-2013/14 and 8 percent according to the GDP deflator. This was easily the strongest bout of inflation experienced in India since 2000. It showed that when an investment boom and a commodity price surge combines with expansionary fiscal and monetary policies, high inflation is unavoidable. As the commodity and investment booms subsided after 2012/13 and expansionary fiscal and monetary policies were reined in, inflation declined steadily to below 4 percent in 2017/18. The significant disruptions associated with Covid and lockdowns triggered another, shorter bout of inflation in 2021-23, which seems to have been reasonably well managed by a combination of demand and supply policies.

During this period, and as noted above, the institutional framework for monetary policy underwent an important change which may have also helped. From 2016 the RBI adopted “flexible inflation targeting” or “FIT” (as dubbed by Partha Ray and Rakesh Mohan, 2024). Just how much difference this made to inflation outcomes is a matter of debate.⁵ On balance, the adoption of FIT probably helped inflation control, partly by elevating the importance of inflation management. At the very least, it has probably not been harmful. However, given the relative frequency of supply side shocks (external or domestic) one should be careful to not downplay the role of supply management policies, such as public food procurement and distribution and energy sector pricing, and, of course, that of fiscal policies.

2.3 External Balance

Usually, the current account deficit (CAD) is the single most monitored indicator of a nation’s external balance position. In India too the rise of the CAD to 3 percent of GDP in 1990/91 preceded the balance of payments crisis of 1991. By this measure, India’s external balance position was remarkably healthy in the first three years of this century, recording atypical

current account surpluses in the three successive years of 2001/2, 2002/3 and 2003/4 (see Figure 5). This was because both goods and services exports (including software) were growing fast (see Figure 6), as were net current transfers (remittances). After 2003/4 the current account reverted to deficit as the domestic investment boom sucked in rapidly growing imports and the oil import bill also grew for both price and quantity reasons. But the CAD remained below 2 percent of GDP until 2007/8, as the strong growth of exports continued. After that the CAD grew steadily, with import growth outpacing exports and peaked at a record 4.8 percent in 2012/13, triggering a mini balance of payments crisis and requiring a set of special measures by the RBI in 2013 to bring the situation under control.

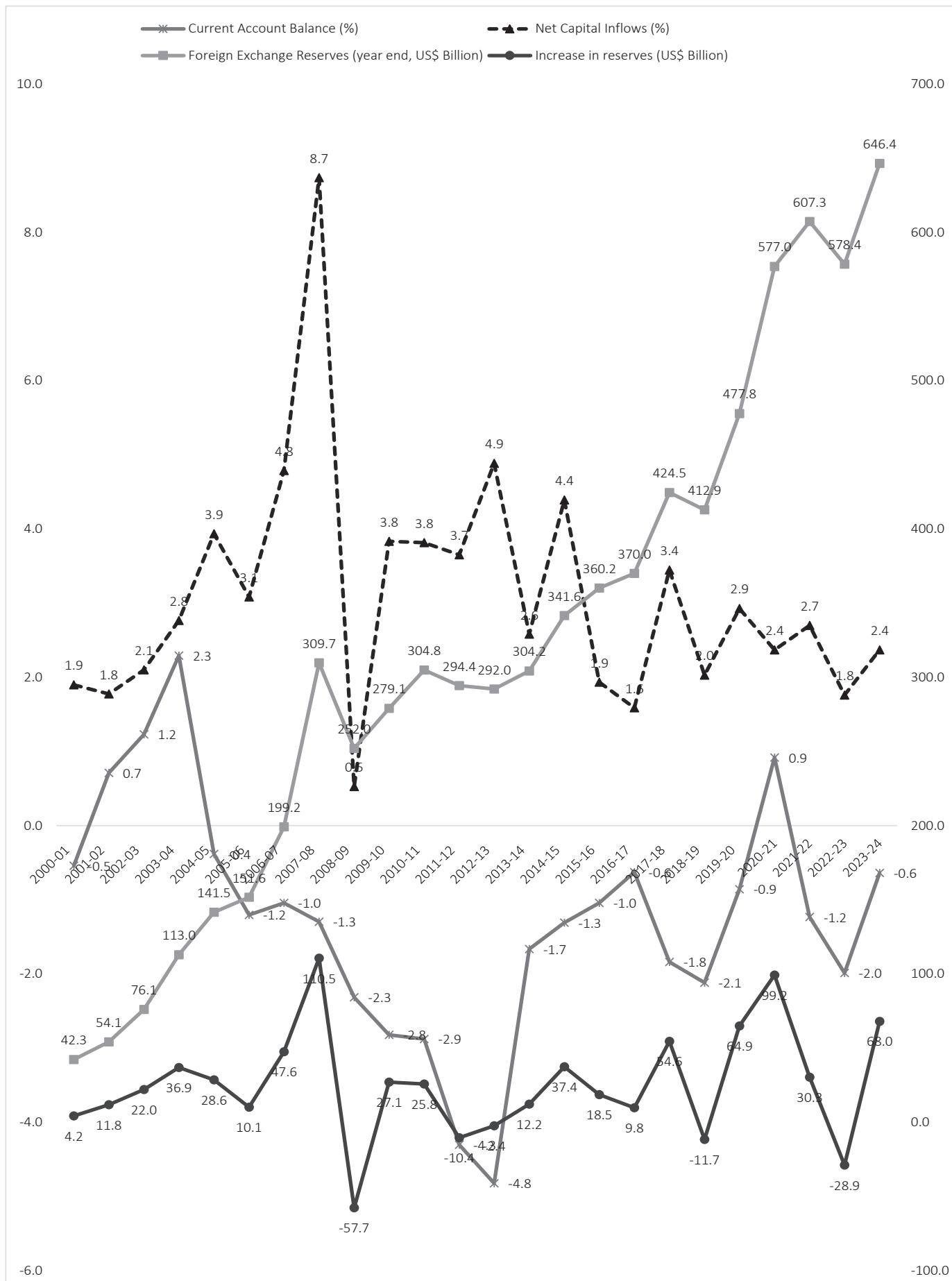
Much of the blame for this mini-crisis could be attributed to the apparent shift in RBI policy towards the exchange rate. Notably, the policy moved towards a relatively hands-off approach to exchange rate management after 2009, in contrast to the earlier, long-prevailing approach of moderating significant appreciation in the real effective exchange rate (REER) through market interventions by the RBI. Thus, as Figure 7 shows, the 6-country REER suddenly appreciated by more than 10 percent in 2010/11 and remained at that elevated level, despite a sharply rising CAD. To manage the mini-crisis the government and RBI had to allow a substantial depreciation in the nominal exchange rate of the rupee, impose restrictions on gold imports and initiate special measures to allow commercial banks to offer de facto exchange rate guarantees on fresh inflows of foreign currency non-resident deposits.⁶ Although the REER increased substantially again after 2014/15 and merchandise exports as a share of GDP fell from 17 percent to 12 percent, the continued buoyancy in service exports and inward remittances helped to keep the CAD at 2 percent or less of GDP right through to 2023/24. Slower growth of imports also helped. It should be emphasized that the movements in the REER were not the sole reason for the substantial decline in the ratio of India’s merchandise exports to GDP during the past decade. Among other factors were India’s relative failure to plug into global and regional value chains, her somewhat ineffective participation in regional free trade agreements (including its last-minute decision to stay out of the Regional Comprehensive Economic Partnership in 2019) and the trend increases in customs tariffs since 2016 and until 2024.⁷

5 Eichengreen and Gupta (2024) and Pandey, Patnaik and Sengupta (2024) broadly assess the experience with FIT in India favorably, while Ray and Mohan, cited above, remain agnostic.

6 For a more detailed account of this period, see Acharya (2015).

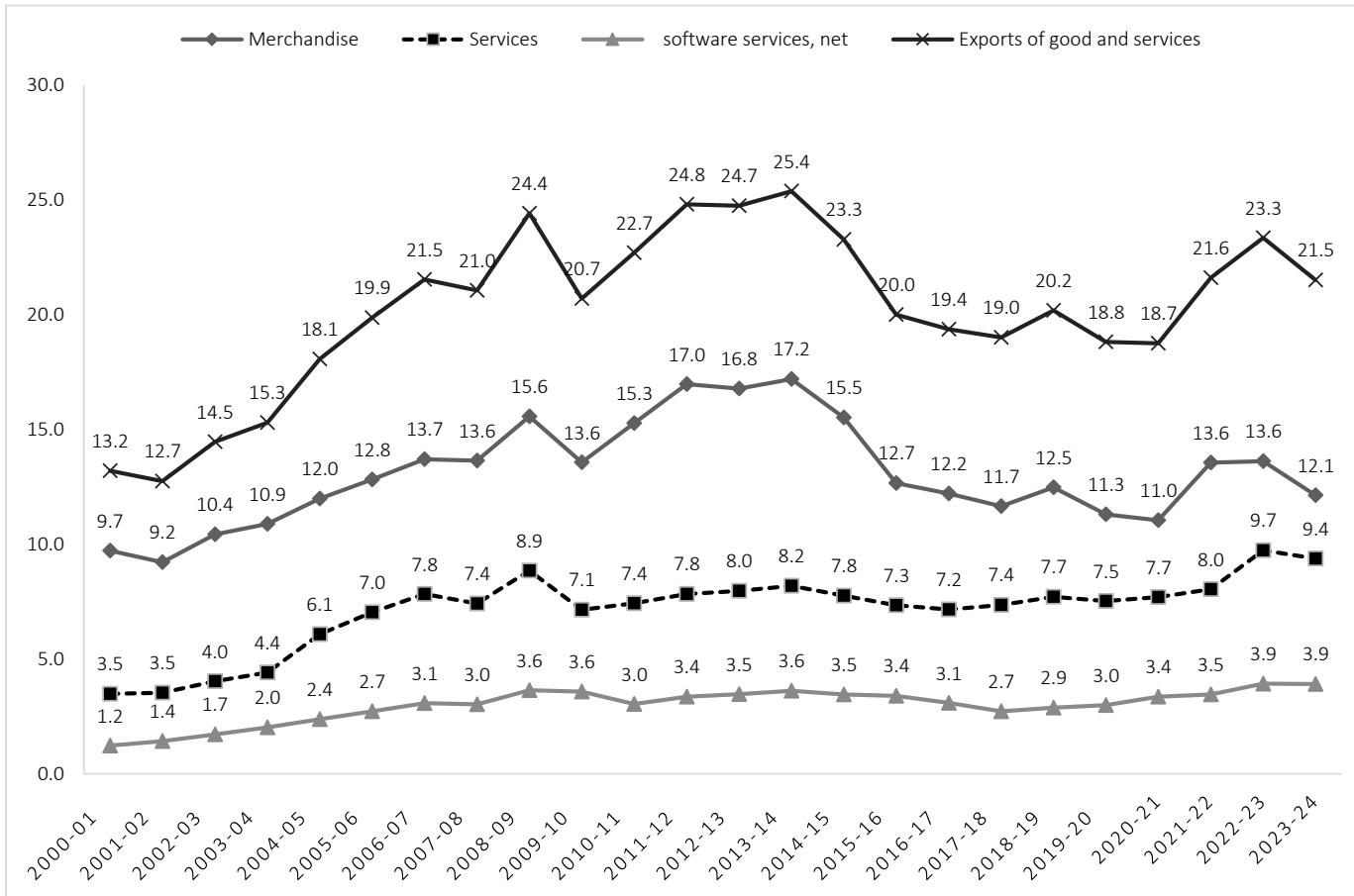
7 For a comprehensive analysis of India’s trade policies in the twenty first century see Batra (2022).

Figure 5: Balance of Payment Components as percent of GDP and Foreign Exchange Reserves in US Billion \$



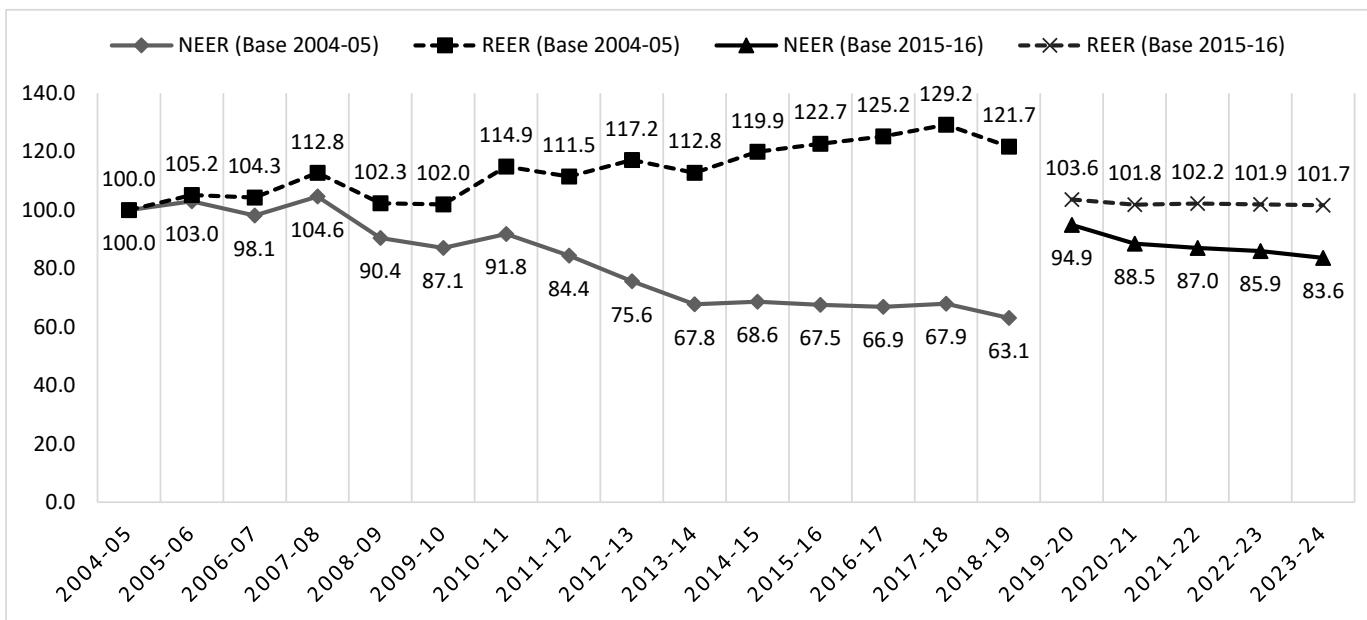
Source: Database of Indian Economy, RBI; Press Note, MOSPI released on 28th February 2025

Figure 6: Export of Goods and Services As percent of GDP at Current Market Prices



Source: Database of Indian Economy, RBI; Press Note, MOSPI released on 28th February 2025

Figure 7: Annual Six-country Trade-weighted Neer and Reer Indices



Source: RBI Bulletins

Another notable development in India's external account since 2000 has been the strong growth of net capital inflows, especially in the first decade. There was an unprecedented ten-fold increase in these flows from about \$ 11 billion in 2002/3 to

nearly \$ 110 billion in 2007/8, amounting to an increase from 2 percent of GDP to a peak of nearly 9 percent. The bulk of these surging inflows occurred in the two years 2006/7 and 2007/8, amounting to over \$ 150 billion. Since the current account was,

on average, close to balance during this period, foreign exchange reserves held by the RBI doubled from around \$ 150 billion in 2005/6 to over \$ 300 billion at end 2007/8. With the NAFC in full force by 2008/9, net capital inflows crashed to 0.5 percent of GDP in that year before recovering to average about 4 percent of GDP in the next six years. After 2014/5, net capital inflows fluctuated at around 2-3 percent of GDP. With the CAD remaining low in the last decade, foreign exchange reserves continue to increase pretty steadily to stand at \$ 646 billion in March 2024.

2.4 Employment

John Maynard Keynes, the generally accepted parent of Macroeconomics, emphasized employment as the key objective of good macroeconomic policy (his seminal treatise was *The General Theory of Employment, Interest and Money*, 1936). Academic and policy discussions of macroeconomic policy in India have tended to downplay this key objective. This is mainly because of the paucity of timely official data on the national employment situation. Until 2017/18 the national surveys of employment and unemployment were conducted only every 5-7

years. Matters have improved since 2017/8, from when these surveys (now called Periodic Labour Force Surveys, or PLFS) have been conducted annually and, for urban areas, every quarter. Table 3 summarizes developments in key labour market indicators, while Table 4 presents the sectoral composition of estimated total employment.

Some salient features of the employment situation since 2000 may be gleaned from inspection of these tables:

First, it is striking and disheartening that despite robust GDP growth averaging over 6 percent over two decades, the share of Informal employment in total employment has continued to be around a very high 90 percent. It indicates serious dualism in India's labour market, whether due laws and regulations, weaknesses in education and skilling, or a pattern of growth which does not generate much demand for unskilled labour.

Second, the labour force participation rate (LFPR) dropped from over 60 percent in 1999/2000 to 50 percent in 2018/19 before recovering to 60 percent in 2023/24.

Table 3: Labour Market Indicators (1999-2000 to 2023-24)

Indicators	1999-2000	2004-2005	2011-2012	2018-2019	2021-2022	2022-2023	2023-24
Informal Employment (%)							
Formal employment	8.5		7.8	11.1	11.0	11.2	
Informal employment	91.5		92.2	88.9	89.0	88.8	
Labour force participation rate (UPSS, aged 15+) (%)							
Male	83.6	84.0	79.8	75.5	77.2	78.5	78.8
Female	38.9	42.7	31.2	24.5	32.8	37.0	41.7
Total	61.6	63.7	55.9	50.2	55.2	57.9	60.1
Worker population ratio (UPSS, aged 15+) (%)							
Male	81.5	82.2	78.1	71.0	73.8	76.0	76.3
Female	38.3	41.6	30.5	23.3	31.7	35.9	40.3
Total	60.2	62.2	54.7	47.3	52.9	56.0	58.2
Unemployment rate (UPSS, aged 15+) (%)							
Male	2.5	2.1	2.1	6.0	4.4	3.3	3.2
Female	1.7	2.6	2.3	5.1	3.3	2.9	3.2
Total	2.3	2.3	2.1	5.8	4.1	3.2	3.2
Youth (15-29) unemployment rate (%)							
Male	6.2		6.0	17.2	12.6	9.7	9.8
Female	4.4		6.8	17.7	11.8	10.6	11.0
Total	5.7		6.2	17.2	12.4	10.0	10.2

Source: *Indian Employment Report, 2024, ILO (based on Employment and Unemployment Survey (1999-2000 to 2011-12) and PLFS annual report (2017-18 to 2022-23)), Annual PLFS Reports*

Table 4: Employment share across economic activity among adults (age 15+) (%)

Economic Activity	1999-2000	2011-2012	2018-2019	2021-2022	2022-2023	2023-24
Agriculture, etc.	61.5	48.8	42.4	45.4	45.8	46.1
Mining & quarrying	0.6	0.5	0.4	0.3	0.3	0.2
Manufacturing	10.5	12.5	12.0	11.6	11.4	11.4
Electricity, gas & water supply	0.3	0.5	0.6	0.6	0.5	0.5
Construction	4.4	10.6	12.1	12.4	13.0	12.0
Trade, hotel & restaurants	9.9	11.0	12.6	12.1	12.1	12.2
Transport, storage & communications	3.6	4.9	5.9	5.6	5.4	5.6
Other services	9.4	11.1	13.9	12.0	11.4	11.9
Finance, business, real estate	1.2	2.3	3.4	3.0	-	--
Public administration, health, education	8.2	8.8	10.5	9.0	-	--
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Indian Employment Report, 2024, ILO (based on Employment and Unemployment Survey (1999-2000 to 2011-12) and PLFS annual report (2018-19 to 2023/24).

Third, the female LFPR fell from above 40 percent in 2004/5 to 25 percent in 2018/19 and then climbed back to 40 percent in 2023/4. It was always greatly lower than the male LFPR, falling to one -third the rate for males in 2018/19. Even in 2023/24 it was only a little over a half of the male LFPR of nearly 80 percent.

The overall unemployment rate, which is a weak indicator of labour market conditions when 90 percent of employment is informal, tripled from 2 percent in 2011/12 to nearly 6 percent in 2018/19, and then fell to 3 percent in recent years.

Youth (15-29 years) unemployment also nearly tripled to 17 percent over the same period before declining to 10 percent in recent years.

It should be noted that much of the improvement in these indicators in the post-Covid years is attributed to the sharp increase of own-account workers (often unpaid), especially females, in family enterprises, predominantly farms. That is why the share of Agriculture in total employment, which had followed the normal pattern of decline as economic development proceeds and had dropped from over 60 percent in 1999/2000 to 42 percent in 2018/9, reversed unexpectedly in post-Covid years and rose to 45-46 percent (Table 4).

The analysis in the government's latest Economic Survey 2024-25 of average real earnings per month

(per day in the case of casual labour) of the three broad categories of labour (self-employed, regular wage/salary and casual), based on the seven annual PLFS's now available, shows significant declines in average real earnings in the case of self-employed and regular wage/salary, especially for females, since 2017/18 and some increase in the case of casual.⁸

Clearly, overall, the labour market conditions in India continues to be one of high stress, despite some improvements in some parameters in recent years.

2.5 Domestic Balance: Deficits, Savings and Investment

Growth, inflation, external balance and employment are the main *ultimate* targets of macroeconomic policy. They are the outcome variables by which an economy's macroeconomic policy is generally evaluated. There is also much interest in a set of intermediate target variables which are crucial for macroeconomic policies. These are fiscal balance, savings and investment.

On a combined basis (central and state governments), India has been running large fiscal deficits for over forty years, essentially a continuing era of "fiscal dominance". With some exceptions, India's fiscal deficit would typically figure among the top seven of eight countries in the world.⁹ In the early years of the first decade of the 21st century the combined deficit ranged between 9-10 percent of GDP, with

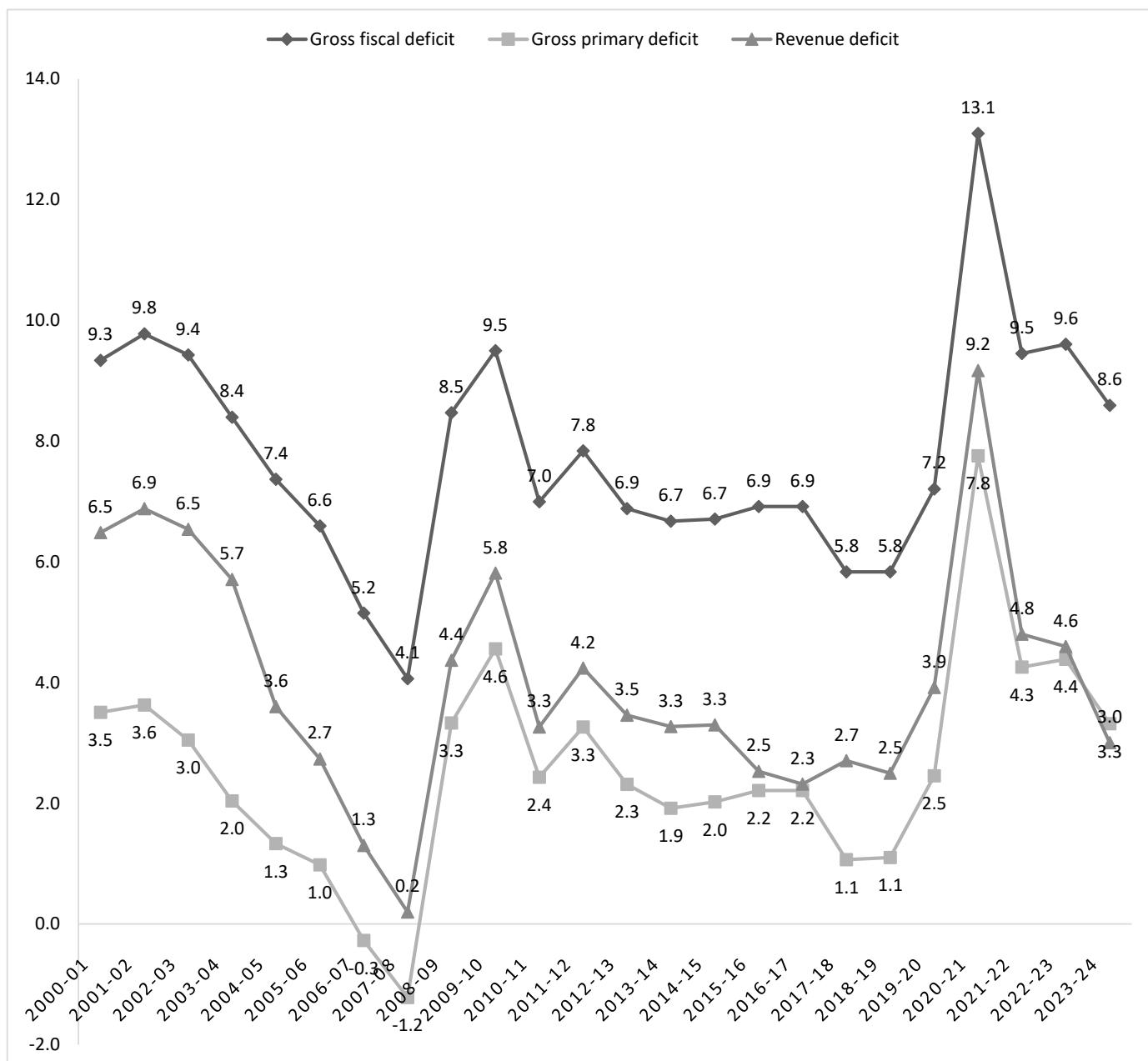
8 See pp376-380, Economic Survey 2024-25.

9 For example, in 2000, India was clubbed with Ethiopia, Turkey and Zimbabwe for the top floor slots (Acharya 2002)

the central government usually accounting for over 60 percent of the combined deficit (Figures 8 and 9). A sustained effort at fiscal consolidation after 2003 (including through fiscal responsibility legislation at both central and state government levels) brought the combined deficit down to 4.1 percent of GDP in 2007/8. The combined revenue deficit (roughly equal to government dissaving) was brought down from over 3 percent of GDP to a small surplus. This major reduction in net government borrowing requirements was a significant contributor to the remarkable investment boom of this period.

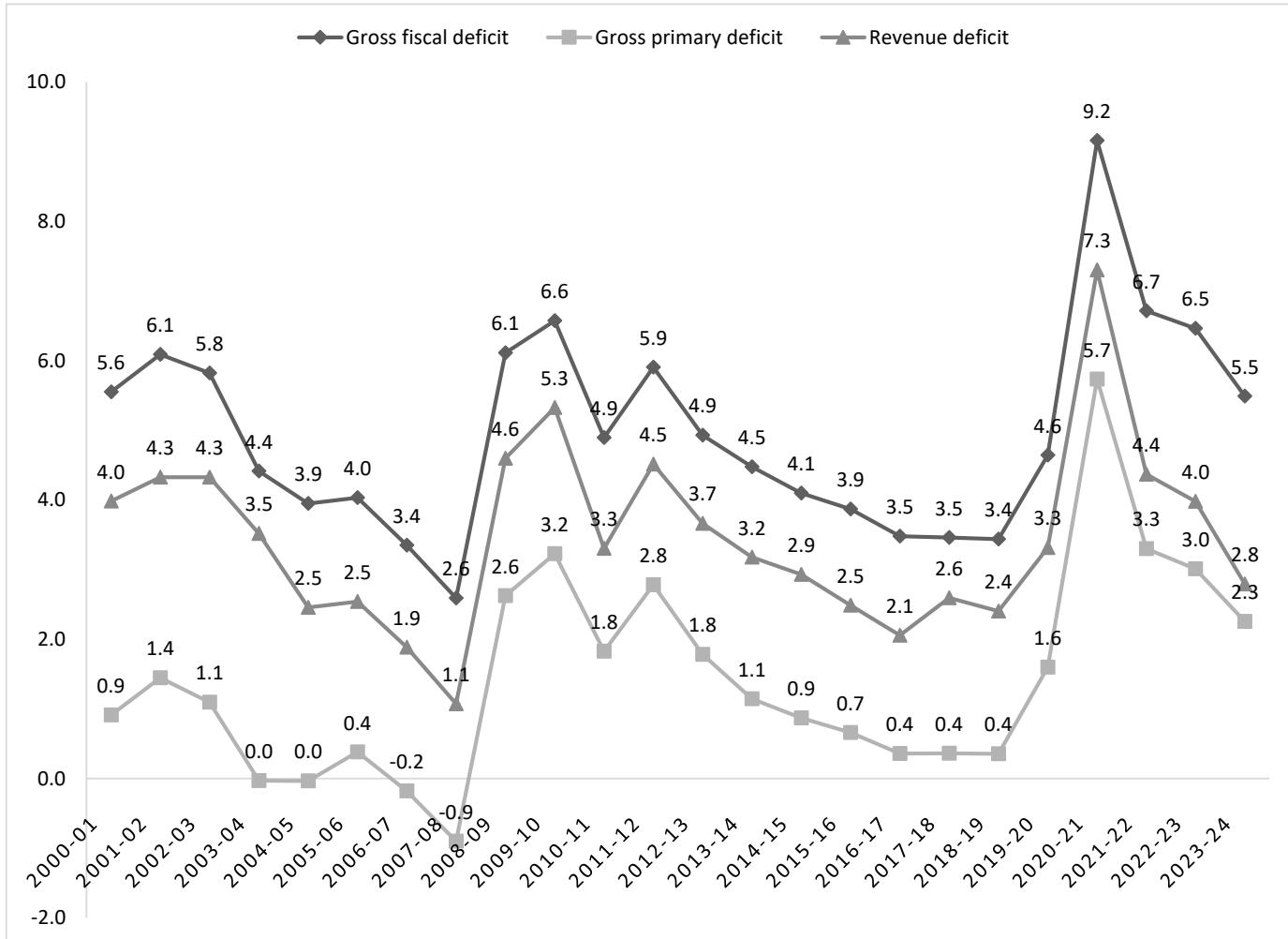
The record overshooting of the budgeted central deficit for 2008/9 (targeted 2.5 percent of GDP, achieved 6.1 percent...actually over 8 percent if off-budget expenditure is included) took the combined deficit right back up to 8.5 percent of GDP in 2008/9 and even higher the following year. It was brought back to a more reasonable 7 percent of GDP in 2010/11 but has stayed above 6 percent ever since (except for a marginal decline to 5.8 percent in 2016-2018). With the advent of the Covid pandemic and the collapse of GDP in 2020/21, the combined deficit shot up to a record 13.1 percent of GDP.

**Figure 8: Combined Deficits of Central and State Government
(As percent of GDP at Current Market Prices)**



Source: Database of Indian Economy, RBI; Controller of General Accounts; Press Note, MOSPI released on 28th February 2025

Figure 9: Deficits of Central Government (As percent of GDP at Current Market Prices)



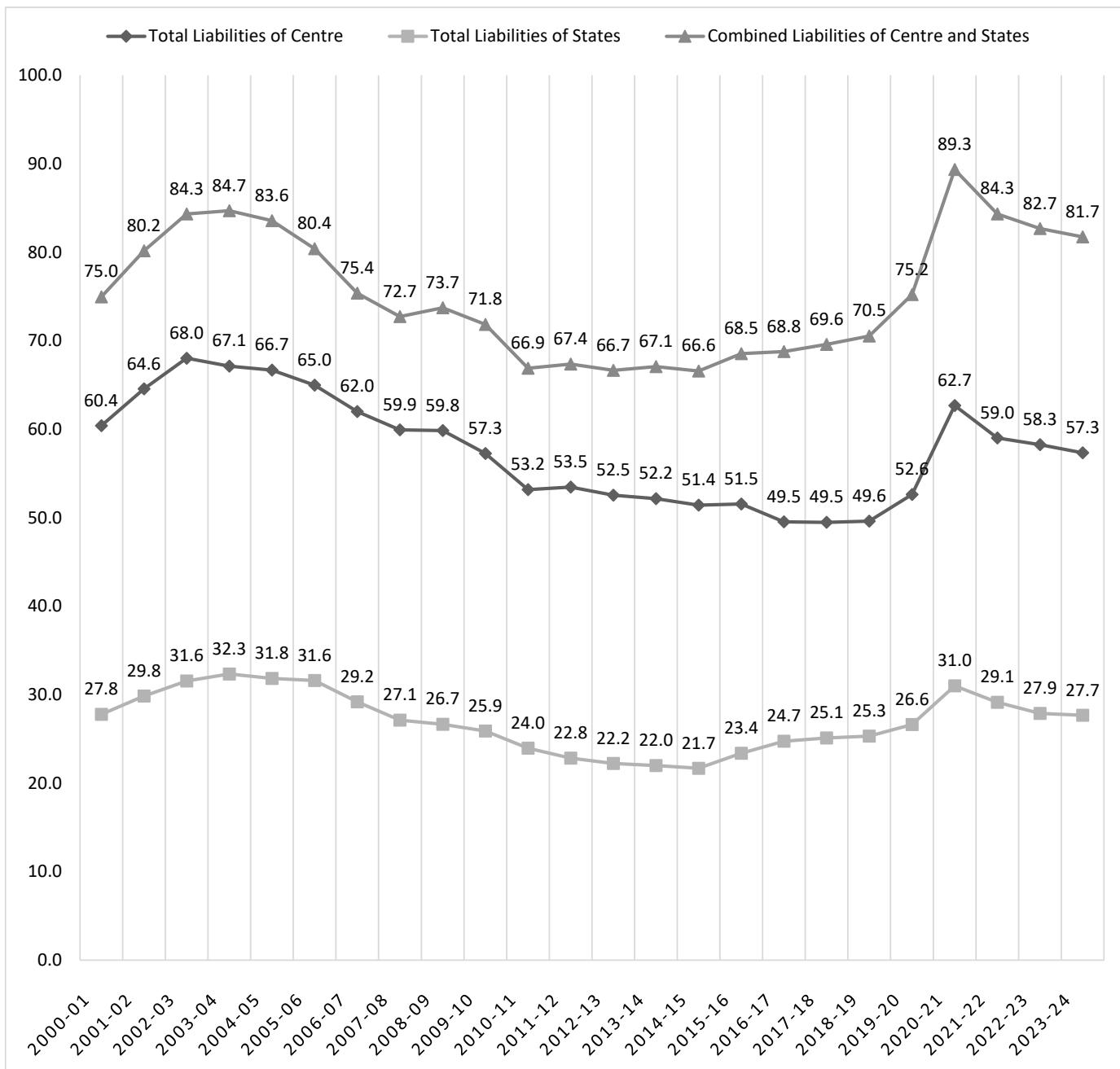
Source: Database of Indian Economy, RBI; Controller of General Accounts; Press Note, MOSPI released on 28th February 2025

Although there has been some consolidation in the ensuing years, the deficit has remained above 8 percent of GDP.

This pattern of high fiscal deficits, except for the notable successful consolidation in 2003-8, is reflected in India's trajectory of the government debt/GDP ratio (Figure 10). From a high level above 80 percent in the early 2000s it came down to a low of 67 percent in 2010/11 before shooting up to a new peak above 89 percent in 2020/21. It has since declined only modestly to 82 percent in 2023/24. This record compares unfavorably with the aspirations expressed in the 2018 amendment to the extant fiscal responsibility law, which targeted a total government debt/GDP ratio of 60 percent, with 40 percent for the centre and 20 percent for the states. Unsurprisingly, the issues of debt sustainability, large annual repayment obligations and high levels of interest payments continue to bedevil the Indian economy and its management.

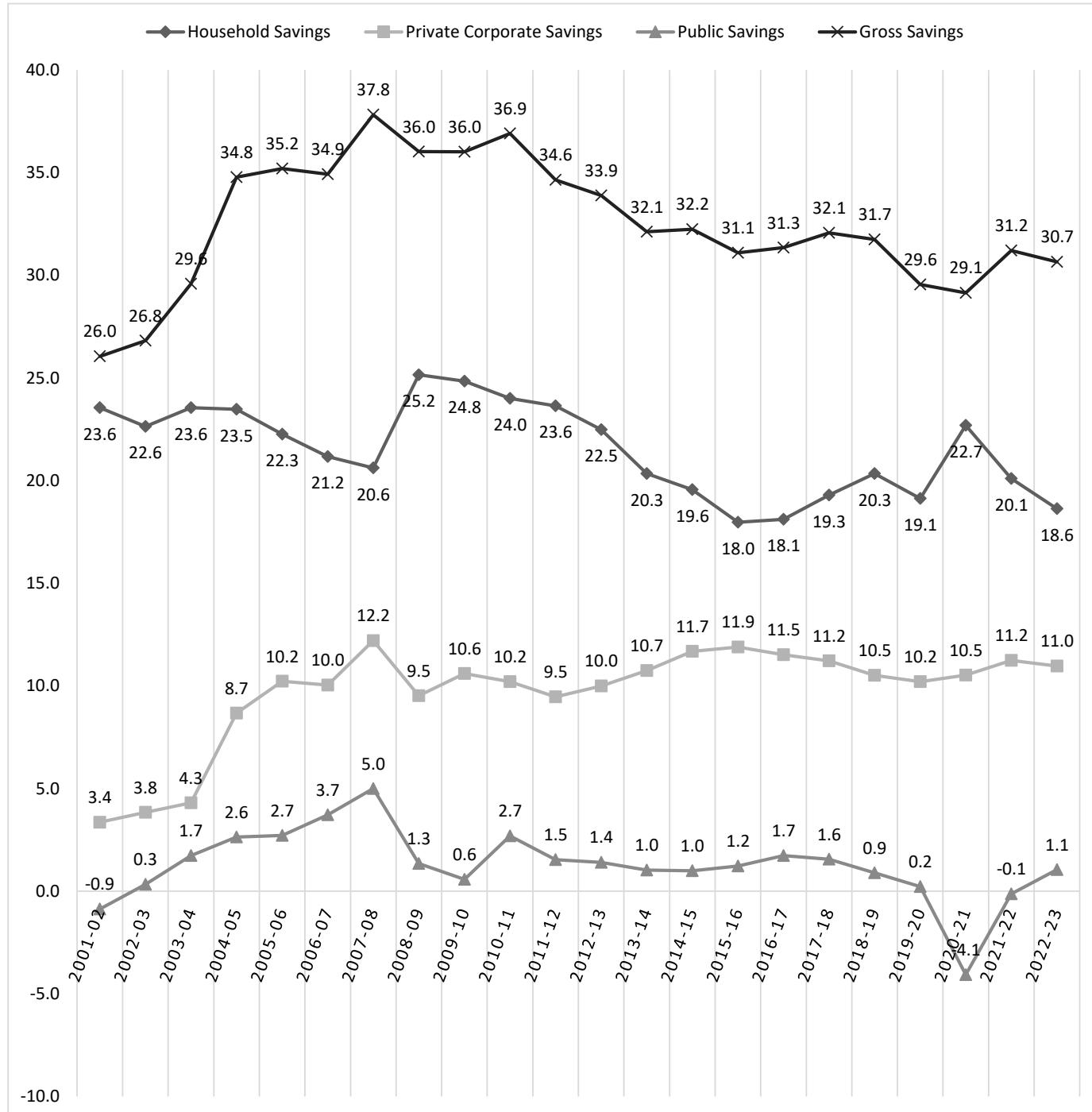
We have drawn attention earlier to the remarkable investment boom in the first decade of the 21st century. What is also noteworthy is that this boom was financed mainly through domestic savings (as reflected by the generally low level the CAD/GDP ratio in this period). Figure 11 shows how gross domestic savings paralleled a similar surge up until 2010/11, followed by a subsequent slow decline. It is noteworthy that while household savings remained the single largest constituent of gross savings throughout the entire period, it was public savings (government and public enterprises) and private corporate savings which propelled the surge in the 2000s. The former rose from near zero in 2001-3 to 5 percent of GDP in 2007-8, while the latter soared from around 3.6 percent of GDP in 2001-3 to exceed 12 percent in 2007/8. Indeed, private corporate savings has remained quite robust at 10-11 percent of GDP throughout the rest of the period. Unfortunately, since 2010/11, both public savings and household savings ratios have declined significantly.

Figure 10: Total Liabilities of Centre, States and Combined, percent of GDP at current market prices



Source: Database on Indian Economy, RBI; Press Note, MOSPI released on 28th February 2025

Figure 11: Gross Domestic Savings As Percent of GDP at Current Market Prices (BASE 11-12)



Source: National Accounts Statistics 2024, NAS Backseries 2011-12, Press Note released on 28th February 2025 MOSPI; Database on Indian Economy, RBI

It may be interesting to look also at who was doing the investment during this entire period (Figure 12). Public sector investment (as a whole) broadly ranged between 7 and 9 percent of GDP throughout the period, with the higher rates occurring between 2005/6 and 2010/11. The rate of private corporate investment soared from less than 6 percent in 2001/2 to a peak of 21 percent in 2007/8, then slumped to

13.9 percent in the following year, recovered to 16 percent of GDP in 2010/11 and fluctuated in the 10-14 percent range thereafter. Household investment started well at 16.4 percent in 2001/2, fell steadily to a trough of 11 percent in 2007/8, recovered to 16 percent by 2011/12, fell again to another trough of 9.6 percent in 2015/16 and then fluctuated between 10-13 percent thereafter.

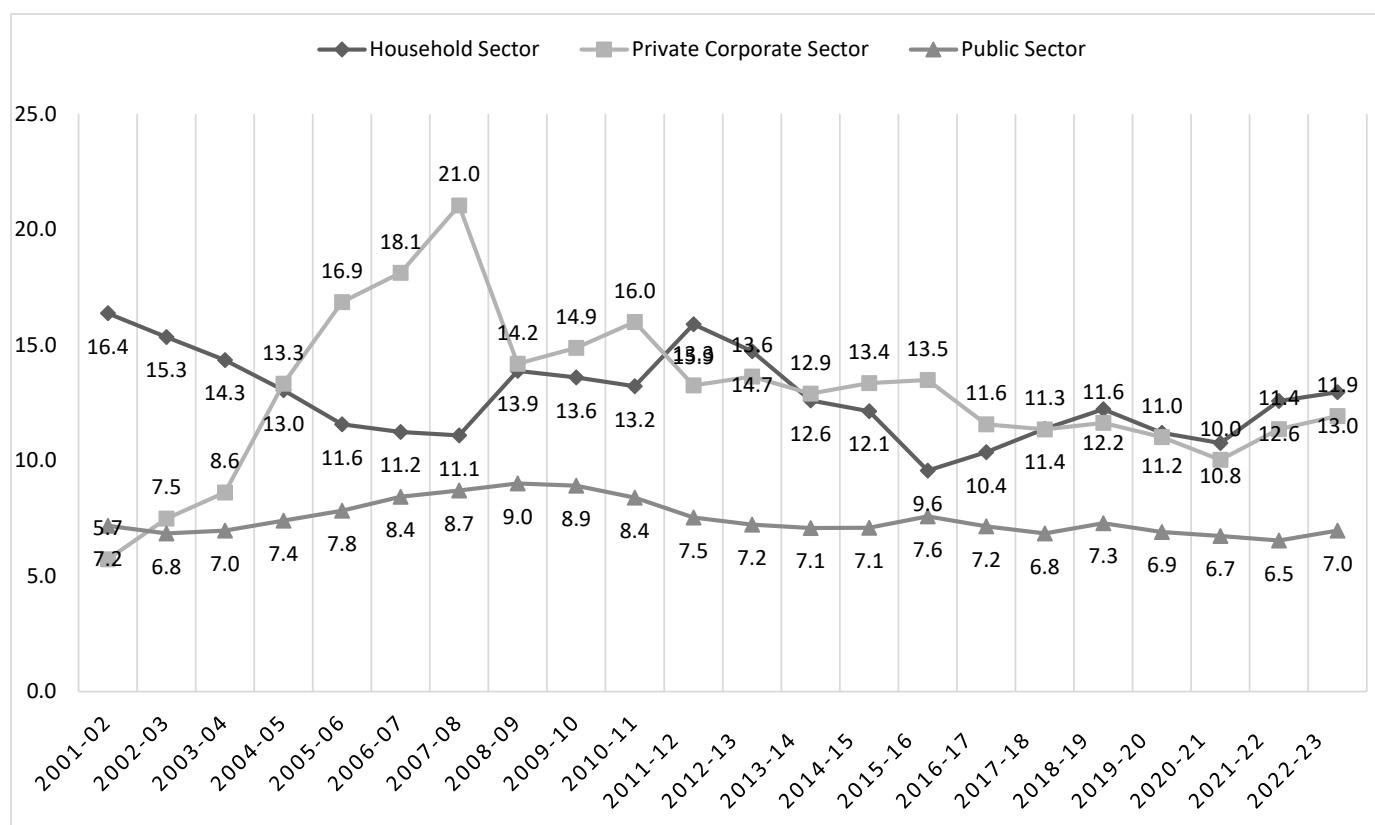
3 Shocks and Policy Responses

3.1 Foreign Capital Surge 2006-8

As seen earlier net capital inflows from abroad surged from 3.1 of GDP in 2005/6 to 8.7 percent of GDP in 2007/8 (Figure 5). In value terms, net inflows increased from \$ 25 billion in 2005/6 to \$45 billion in 2006/7 and then more than doubled to \$ 106 billion in 2007/8. This extraordinary and unprecedented surge posed a significant macroeconomic management challenge to the authorities (government and RBI).

If the RBI did not intervene in the foreign exchange market both the nominal and real exchange rates of the rupee would have increased greatly, jeopardizing the sustained boom in exports of goods and services that had been under way since the early 2000s. So, consistent with the extant policy of “soft targeting” of the real effective exchange rate that had been pursued since the early 1990s, the RBI bought nearly \$ 150 billion dollars, which was added to its holding of foreign exchange reserves in those two years. This led to a doubling of the stock of reserves to over \$ 300 billion.

Figure 12: Institutional Sector Wise Gross Domestic Capital Formation As percent of GDP at Current Market Prices (Base 11-12)



Source: DBIE: RBI, NAS Back Series 2011-12, Press released on 28th February 2025 MOSPI

Such a large increase, if not addressed, would have led to substantial expansion of money supply and a consequential upsurge in inflation. Hence, the RBI simultaneously upped its level of open market sales of government bonds from its asset holdings to offset or “sterilize”, at least partially, the massive injection of dollar reserves. In fact, the surge in dollar reserves was so large and sudden, the offsetting actions could not wholly neutralize the dollar inflows, resulting in significant expansion of liquidity and inflationary pressures. These showed up in 2008/9. But by then the world had changed: the NAFC was in full flow by the second half of the year.

3.2 NAFC and its impact on India

The NAFC, rooted mostly in the United States and Europe, was several years in the making and had multiple causes including: the prolonged housing boom in the US and some European countries along with the growing practice of subprime lending; persistent global imbalances in external finances; an extended period of accommodative monetary policy in major industrial nations; the proliferation of opaque financial derivatives, which spread the risk of dodgy loans (including mortgages) throughout the financial systems of industrial countries; the failure of credit rating agencies and an increasingly lax

culture of financial regulation and supervision, which fueled the prolonged, and ultimately unsustainable, financial boom.

The house of financial cards began to topple in the winter of 2006/7 when house prices began to fall. By the summer of 2007 several mortgage banks and hedge funds went under. In September the UK's Northern Rock Bank had to be bailed out by the Bank of England and the government. In March 2008, Bear Stearns the fifth-largest US investment bank ceased to exist. The financial unraveling climaxed in September 2008 when US Federal Reserve and the US Treasury had to orchestrate massive bailouts and buyouts of the government sponsored mortgage finance institutions, Fannie Mae and Freddie Mac, the iconic investment bank Merrill Lynch and the world's largest insurance company, AIG. On September 15, Lehman Brothers was allowed to topple into bankruptcy, resulting in a freezing of credit markets in industrial nations and the transmission of a sudden liquidity shock across the entire world. By then, the Great Recession was well underway, bringing overall economic growth to a virtual halt in 2008 in industrial countries, followed by a 3 percent decline in their GDP in 2009.

In India, all this was distant thunder initially, until the big shocks of September 2008 were transmitted through trade and capital flow channels. The policy focus in the first half of 2008/9 was focused on the 2002-7 global boom-triggered surge in commodity prices (including especially, oil, fertilizer and food), which had led to a significant tightening of monetary policy, and the massive increases in budget subsidies for these products whose administered prices were deliberately not adjusted (2009 was an election year). The February 2008 central government budget was also massively underfunded for the inevitable large expenditure requirements from the Sixth Pay Commission award, the new farm loan waiver scheme and the National Rural Employment Programme. All this led to a record overshooting of the fiscal deficit target of 2.5 percent of GDP by nearly 4 percentage points of GDP (and even more when off-budget bonds for oil and fertilizer were factored in).

The fortuitous coincidence of such record fiscal profligacy with the contractionary impulses from the

NAFC and the associated Great Recession allowed the government to later claim credit for the profligacy, now conveniently dubbed as "countercyclical expansionary fiscal policy". As the dimensions of the NAFC became better understood monetary policy was swiftly loosened, with RBI's short-term policy interest rate reduced steeply from 9 percent in September 2008 to 3.25 percent in April 2009. The modal central excise tax rate was also halved in two steps from 16 percent to 8 percent. The execution of all this expansionary fiscal and monetary policy certainly helped contain the deflationary impact of the NAFC and the Great Recession to a single year decline in the GDP growth rate to 3.1 percent in 2008/9, before it bounced back to an average of 8.3 percent in the next two years.¹⁰ But it came at a high cost of inflation ratcheting up to 8-9 percent in the next six years and the combined fiscal deficit soaring to 8.5 percent in 2008/9 (and 9.5 percent in 2009/10), thus wiping out the hard-won fiscal consolidation of 2003/4-2007/8.

3.3 Covid and the Indian economy

It is important to understand that when Covid 19 came to India in March 2020, the country's economy was already doing poorly. GDP growth had slowed markedly from 8.3 percent in 2016/17 to 3.9 percent in 2019/20, partly as a result of earlier shocks such as demonetization (November 2016) and GST transition (July 2017). The employment situation was poor, investment was slowing, the share of exports in the economy had fallen over eight years, the combined fiscal deficit was running at over seven percent of GDP and the banking and finance sector was under serious stress.

Effective March 24 a strong lockdown was imposed nation-wide at only a few hours' notice. The objective was to reduce infections, morbidity and mortality from Covid, especially during the initial months before an effective vaccine could be developed and distributed, and various public health protocols could be put in place.

The first two and a half months of fairly strict lockdown hammered the Indian economy harder than any other external or internal shock experienced since Independence. The nation's industrial output plummeted by over 50 percent in April, exports

¹⁰ Actually, according to the earlier, 2004/5 base national income series, GDP in 2008/9 only declined to 6.8 percent in 2008/9.

and imports by about 60 percent, and the revenues of central and state governments collapsed. GDP in the April-June quarter fell by over 20 percent. According to the rolling household surveys of Centre for Monitoring the Indian Economy (CMIE) over 100 million Indians lost their jobs between mid-March and April as unemployment soared and labour force participation rates fell steeply. The overwhelming bulk of livelihood losers were daily wagers, small traders and hawkers of the informal sector. Tens of millions of migrant workers trudged back from urban centres to distant rural homes. With the phasing out of lockdowns most of these lost jobs returned by August but there is evidence of lasting damage in terms of average real incomes and wages in informal employment, which accounts for about 90 percent of the total employment.

With the progressive lifting of lockdown provisions in June, output, employment and incomes recovered remarkably swiftly, with full-year GDP decline in 2020/21 estimated at “only” 5.8 percent, followed by real GDP growth estimated to average more than 8 percent in the three years following. The strength of the recovery was helped by fiscal and monetary policies of the government. Government expenditure levels (as share of GDP) were increased by about 4 percentage points of GDP in 2020/21 in the face of sharp revenue losses in the first half of the year, resulting in the combined fiscal deficit soaring to a record 13.1 percent of GDP in 2020/21.¹¹ This constituted a major fiscal stimulus, which was only gradually moderated to a still high 8.8 percent of GDP by 2023/24 (Figure 8). The impact of the stimulus was also probably heightened through its inclusion of government credit guarantee programmes for selected sectors.

Contemporaneously, the RBI announced a broad array of conventional (such as repo rate reductions and CRR reductions) and unconventional (such as long-term repo operations and asset purchase programmes) measures. The latter amounted to 8.7 percent of nominal GDP, of which about 6 percent of GDP was actually availed (see Ray and Mohan (2024)). Together, all these measures helped to support aggregate demand in the face of the Covid shock and also provided targeted assistance to the more vulnerable sections of the community.

However, despite the good recovery of aggregate economic growth, Covid+lockdown’s disproportionately heavy impact on informal employment and output, retarded the recovery in the informal sector. The popular term for this was to call it a K-shaped recovery, with the formal sector recovering faster than the informal. This was reflected in several indicators, including: the slow growth in sales of two-wheelers versus passenger cars, within passenger cars, the faster growth of SUV sales versus small cars; faster growth of luxury flat sales versus “affordable” housing units; and so on. The sluggish growth of fast-moving-consumer goods was another indicator of the two-speed recovery. Taken overall, the post-Covid pattern of development seems to have been somewhat dualistic in several respects: formal vs informal, corporate vs MSMEs, urban vs rural and so on. As Chinoy (2025) has argued, with the better off segment of society growing faster than the less well off, aggregate consumption was constrained to a slower growth path than it might have been (because the rich save more than the poor), which, in turn, may have discouraged private investment. Indeed, given that India’s national income accounting methods sometimes use formal sector growth to proxy for the data-poor informal sector, this may well have lent an upward bias to overall growth estimates.

Whether the fiscal and monetary responses were too little or too much (with the benefit of hindsight) remains a matter of continuing debate and analysis. The same applies to the severity and duration of the government’s various lockdown provisions.

4 Macroeconomic Challenges Ahead

The year 2024/25 may turn out to a “hinge of fate” year for India and, perhaps, the rest of the world. Writing in Spring 2025, it is clear the GDP growth has slowed markedly to 6-6.5 %, even if inflation has slid to benign levels. More importantly, for India and the world, the first three months of the second Trump administration (generally dubbed Trump 2.0) has ushered in an astonishing set of unilateral American policies that seems destined to overturn the “liberal international economic order”, as the US turns decisively isolationist. America has withdrawn from several multilateral organizations and agreements,

¹¹ Details of the fiscal measures are given in Economic Survey, 2020/21.

such as the WHO and the 2015 Paris agreement of Climate Change, and initiated serious trade wars against major trading partners, Including Canada, Mexico, European Union and China as well as higher tariffs for almost all countries, in clear violation of WTO norms and commitments. Internally, it has launched a ruthless campaign against federal government expenditure and a swathe of regulatory agencies for protection of the environment and consumers. Early indications suggest US economic growth will slow significantly in 2025, as will the growth of world output and trade.

Against this darkening global environment, India's macroeconomic challenges are likely to mount.

4.1 Growth

The goal of *Viksit Bharat* was announced in 2022, aimed at making India into a “Developed Country” by 2047, a 100 years after Independence. Development means a lot more than growth of GDP and per capita national income. However, most analysts have, as a first cut, taken *Viksit Bharat* to mean achieving a per capita GDP of about \$ 14,000 in 2023 prices and exchange rates by 2047. Various studies suggest that this would require a sustained annual growth rate of about 8-9 percent of GDP up to 2047.¹² In India's recorded economic history, the only consecutive period five-year period of 8 percent growth was in 2003-8, when the growth of investment, savings and exports was exceptionally fast. True, the economy grew at an average rate higher than 8 percent in the last 3 years, 2021/22-2023/24, but that was from the low, Covid-hit GDP base of 2020/21. Indeed, when one includes that year and the one preceding, the 5-year growth rate averages only a little above 5 percent.

To accelerate economic growth from the current 6-6.5 percent to 8 percent plus, on a sustainable basis, would probably require an increase in domestic savings and investment rates to about 36-38 percent and 38-40 percent of GDP, respectively, from current rates of about 30-31 and 32-33 percent.¹³ Most of the increase would have to come from a revitalization of private corporate savings and investment, which has

been running at significantly lower levels compared to 2003-8. Some of the increase would also have to come from improvements in public and household savings and investment.

The necessary increase in private investment and savings would likely require a very substantial improvement in the “ease of doing business” (including a great deal of deregulation at all levels of government) and clear visibility of strong and sustained demand from both domestic consumption and the exports of goods and services, both of which have been languishing in recent years. It would also likely necessitate far reaching structural reforms in our policies on foreign trade, urbanization, land and labour markets, infrastructure provision and human capital development through much better provision of education and health services.

All this is a tall order and greatly complicated by the worsening of the international economic environment.

4.2 Employment

We noted earlier the deterioration of various labour market indicators between 1999/2000 and 2018/19, followed by some recovery since. Overall, there seems to have been no significant improvement in labour market conditions in the 24 years since 1999/2000. Indeed, there may have been some worsening. And this is despite GDP growth averaging around 6 percent over these years. In his recent presidential address to the Indian Econometric Society, Mundle (2025) calls it the “growth employment paradox”. Focusing on the shorter period of 2011/12 to 2023/24, he notes that while compound GDP growth rate over these dozen years has been 5.9 percent, the compound rate of growth of employment has been only 2.1-2.4 percent, varying according to the three different reference periods for the employment question deployed in the national sample survey questionnaires. Furthermore, and more worryingly, the “growth of employment has not kept pace with the growth rate of the labour force, which has ranged between 2.2 and 2.5 percent for the period.”

12 See, for example, Behera, Dhanya, Priyadarshi and Goel (2023).

13 For a very good and fuller articulation of similar views, see Chinoy (2025).

Chinoy (2025) raises similar warnings while emphasizing that the demographic transition in India, which has been in train over the last 25 years, raising the ratio of working age population to total population. This one-time opportunity to increase employment and growth is now about two-thirds spent, with only a decade or so left before this key ratio begins to decline. So far, this great opportunity has been only partially exploited in India because of weak demand generated for labour (especially low-skill labour) by India's pattern of development and the prevailing low female labour force participation rates. What is needed for higher growth of both output and employment is a combination of rapid growth of demand for low-skill labour, coupled with higher rates female participation in the labour market. The former requires faster growth of labour-intensive sectors, through reduction of regulatory impediments to labour use, faster growth of low-end manufacturing sub-sectors in both domestic and export arenas, and targeted skilling opportunities in many areas, while not forgetting the urgent need for general improvements in human capital through much better basic education and health programmes. The latter entails progress in general social norms as well as serious improvements in overall law and order conditions, which would facilitate greater participation by females in the labour force.

4.3 External Balance

We have already commented earlier on the relative stagnation of India's merchandise exports (and their decline as a ratio to GDP) since 2012/13. This remains the single most important foreign exchange earner in India's balance of payments (BoP). For any sustainable trajectory of rapid economic growth, global experience shows that rapid growth in exports is necessary. With the right policies it can also provide a significant stimulus to employment growth, especially of low-skilled labour, which India has in great abundance. The policy reforms necessary for faster growth of exports are well-known and include: maintenance of a competitive exchange rate, substantial reduction of import duties (especially on inputs), more efficient logistics and trade facilitation systems, and effective participation in important Free Trade Agreements, such as with EU, US, UK and the mega regional Asian ones of RCEP and CPTPP. The greatly heightened trade and investment uncertainties imposed by Trumpian US policies in recent months has increased the urgency of reforms by India in these areas.

Faster growth of merchandise exports needs to be supported and complemented by rapid growth of net foreign direct investment (FDI). In 2023/24 net FDI into India had fallen to a 20 year low of 0.3 percent of GDP. This decline needs to be reversed urgently to support higher economic growth. To a large extent, the policies that stimulate domestic private investment will also catalyse more net FDI. So will well-designed bilateral investment treaties and chapters of FTA agreements. The volatility of net inward investments by foreign institutional investors (FIIs) during 2024/25 has demonstrated the risks of over-reliance on such footloose capital in a fast-changing world. Similarly, the surge in net external commercial borrowing by Indian firms can be a mixed blessing and needs to be closely monitored. Global experience warns against excessive foreign currency indebtedness.

The strong performance of India's service exports (especially IT and IT-enabled exports) in recent year has been an important factor ensuring low levels of current account deficits in the BoP. However, given the very rapid recent increase in AI applications globally, it is possible that the growth of India's IT exports may plateau as AI substitutes for a wide range of white collar jobs, including those in the lower-end of IT exports.

4.4 Domestic Balance

We saw earlier that India's combined fiscal deficit had shot up to 13.1 percent of GDP during the Covid-hit crisis year of 2020/2021, with most of the increase occurring on the Centre's account. Since then, largely because of the Centre's efforts at fiscal consolidation, the combined deficit had declined to 8.6 percent of GDP, by 2023/24, with the Centre's falling to 5.5 percent of GDP. 2024/25 has been another year of consolidation with Centre's deficit expected to decline to 4.7-4.8 percent of GDP and the combined deficit to about 8 percent of GDP. Given the turmoil in the world economy these are still high levels, which expose India's finances to possible external shocks. Furthermore, the total government debt to GDP ratio remained very high at 82 percent in March 2024, with little, if any, decline expected by the end of 2024/25. Hence the need for further fiscal consolidation continues and was reflected in the Centre's February budget for 2025/26. The budget also contained a welcome announcement to focus more on public debt dynamics.

As Chinoy shows, the future profile of the government debt to GDP is sensitive to the rate of nominal GDP growth.¹⁴ Small changes in this could make substantial changes to India's debt sustainability. The best insurance against bad outcomes is for the centre to persevere with fiscal consolidation. Given the obvious needs for increasing expenditure on health, education and defence, future fiscal consolidation will require broadening the base of both direct and indirect taxes, including necessary reforms of GST and a containment of exemptions granted under income tax. To ensure reduction of

the debt to GDP ratio, it would also be desirable to reinvigorate the flagging programme of asset sales by the Centre.

States must also play their role in the reduction of the combined debt to GDP ratio. This requires better performance in fiscal consolidation at the state level. Furthermore, the Centre and RBI may need to gradually reflect the variation across state fiscal parameters in the interest rates charged on fresh borrowings by states.

¹⁴ See Chinoy (2024).

References

Acharya, Shankar, 2002, "Macroeconomic Management in the Nineties," *Economic and Political Weekly* XXXVII (16) 1515-38. Reprinted in Acharya (2006).

_____, 2006. *Essays on Macroeconomic Policy and Growth in India*. New Delhi: Oxford University Press.

_____, 2010. *Macroeconomic Performance and Policies, 2000-08*, in Acharya and Mohan (2010).

_____, 2015. *Towards Economic Crisis and Beyond*. New Delhi: Academic Foundation.

Acharya, Shankar and Rakesh Mohan. 2010. *India's Economy : Performance and Challenges*. Delhi : Oxford University Press.

Batra, Amita. 2022. *India's Trade Policy in the 21st Century*. London: Routledge.

Batra, Amita and Ashok Bhattacharya . 2025. *A World in Flux : India's Economic Priorities*. Delhi : Rupa (forthcoming).

Beheria, Harendra, V. Dhanya, Kunal Priyadarshi and Sapna Goel. 2023. "India@100", *RBI Bulletin*, July 2023.

Chinoy, Sajjid, Toshi Jain and Divyanit Sood. 2024. "Reimagining India's Fiscal Architecture", *Indian Public Policy Review*. 2024. (515). 109-117.

Chinoy, Sajjid. 2025. "Getting Rich before Getting Old: India's Macroeconomic Imperatives in a Post-Pandemic World", in Batra and Bhattacharya (2025, forthcoming).

Eichengreen, Barry and Poonam Gupta. 2024. "Inflation Targeting in India: a Further Assessment". *NCAER Working Paper # 174*.

Government of India. 2021. *Economic Survey, 2020-21. Delhi*.

_____. 2025. *Economic Survey, 2024-25. Delhi*.

Mundle, Sudipto. 2025. "The Growth Employment Paradox and How to Address it". Presidential Address at the 59th annual conference of the Indian Econometric Society.

Pandey, Radhika, Ila Patnaik and Rajeswari Sengupta. 2024. "The Journey of Inflation Targeting in India", *Indira Gandhi Institute of Development Research, Working Paper 2024-022*.

Ray, Partha and Rakesh Mohan. 2025. "Recent Developments in Indian Central Banking : Flying through Turbulance but aided by Tailwinds". *Asian Economic Policy Review* (2025) 20, 103-123, Tokyo.

Subramanian, Arvind. 2019a. "India's GDP Mis-estimation : Likelihood, Magnitude, Mechanisms and Implications", *Harvard Centre for International Development, Working Paper # 354*.

_____. 2019b. "Validating India's Growth Estimates" *Harvard Centre for International Development, Working Paper # 357*.

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ICRIER has two office locations in Delhi; in the institutional complex of India Habitat Centre and a new office at the Institutional Area, Sector 6, Pushp Vihar, New Delhi.

ICRIER's Board of Governors include leading academicians, policymakers, and representatives from the private sector. Mr. Pramod Bhasin is ICRIER's chairperson and Dr. Deepak Mishra is Director & Chief Executive.

ICRIER conducts thematic research in the following five thrust areas:

1. Growth, Employment and Macroeconomics (GEM)
2. Trade, Investment and External Relations (TIER)
3. Agriculture Policy, Sustainability and Innovation (APSI)
4. Digital Economy, Start-ups and Innovation (DESI)
5. Climate Change, Urbanization and Sustainability (CCUS)

To effectively disseminate research findings, ICRIER organises workshops, seminars and conferences to bring together academicians, policymakers, representatives from industry and media to create a more informed understanding on issues of major policy interest. ICRIER routinely invites distinguished scholars and policymakers from around the world to deliver public lectures and give seminars on economic themes of interest to contemporary India.

