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THE INDIAN ECONOMY: A MACROECONOMIC TURNAROUND[1]

In 2016, India celebrated the 25th anniversary of its economic reforms. Initiated in 1991 as a result of a severe fiscal deficit-driven balance of payments (BOP) crisis, the economic reforms comprised three pillars: privatization, liberalization, and globalization. The reforms saw India gradually break free of the low-growth trap that had characterized it up to the 1980s—euphemistically called the "Hindu growth rate"[2]—and join the league of the fastest-growing nations of the world. In 2016, with an annual growth rate of 7.6 per cent, the Indian economy emerged as the fastest-growing economy in the world, outpacing China's 6.9 per cent annual growth rate. In April 2016, India's finance minister addressed a meeting of investors in New York and spoke of India achieving an 8.5 per cent annual growth rate in 2016/17.[3] The movement in the country's macroeconomic indicators in the past 25 years pointed to a macroeconomic turnaround. What elements constituted this turnaround? How strong was this turnaround story? Was it sustainable? Could internal or external factors affect the positive growth?

BACKGROUND[4]

India had remained a closed economy until 1990/91. A severe fiscal deficit-driven BOP crisis in 1991 had reduced India's foreign exchange reserves to less than US$1 billion[5] in July 1991[6]—not enough to sustain two weeks of imports[7]—and brought India to its knees.[8] The sharp increase in oil prices following the Gulf War led to the first signs of the crisis in the second half of 1990/91. The immediate cause for the decline in foreign exchange reserves from September 1990 arose from the current account side of the BOP. Oil import prices rose sharply from $287 million per month in June–August 1990 to $671 million per month in the following six months, accounting for the rise in trade deficit from $356 million per month to $677 million per month over the same period. The rise in the cost of oil imports was aggravated by the cessation of exports to Iraq and Kuwait worth more than $280 million, following the United Nations trade embargo on Iraq, and the loss in remittance flows, as Indians working in Kuwait had to be air-lifted following developments in the region.

The changes to the capital account, accompanying changes in the trade account, exacerbated the situation and reflected a crisis of confidence in the government's ability to manage the situation. Both short-term credit and medium-term commercial loans dried up and became costlier as India's credit rating decreased. April–June 1991 saw an outflow from the country of non-resident Indian deposits worth $952 million.

The government undertook a series of policy counter-measures in the second half of 1990/91 to compress imports as a means of managing the BOP. However, these measures proved counter-productive, leading to a drastic decline in the Index of Industrial Production (IIP), which decelerated by 3 per cent in June 1991/92, compared with a 12.1 per cent increase in June 1990/91. Such import compression could not have been sustained without a resultant loss in production and employment, and the consequent economic chaos. The Government of India's Economic Survey for 1991/92 noted, "A default on payment for the first time in our history had become a serious possibility in June 1991."[9]

A new government assumed office in June 1991.[10] To restore confidence, the government's first step was to "lease 20 tonnes of gold out of its stock to the State Bank of India to enable it to sell the gold abroad with an option to repurchase it at the end of six months."[11] In addition, it allowed the Reserve Bank of India (RBI) to ship 47 tonnes of gold to the Bank of England in July 1991 to raise $600 million.

To find a sustainable solution to the crisis, the government embarked on a new economic policy, comprising privatization, liberalization, and globalization. The then finance minister had quoted the French novelist Victor Hugo when presenting the union budget on July 24, 1991: "No power on earth can stop an idea whose time has come." He concluded the budget with the declaration: "Let the whole world hear it loud and clear. India is now wide awake. We shall prevail. We shall overcome."[12]

The Government of India undertook four major policy initiatives to address the BOP problem and the structural rigidities: a fiscal correction, trade policy reforms, industrial policy reforms, and public sector reforms. To tide things over, the government simultaneously sought the support of multilateral financial institutions—the International Monetary Fund (IMF), the World Bank, and the Asian Development Bank—and also bilateral donors. The government took recourse to exceptional financing of $2.3 billion from the IMF, besides negotiating a structural adjustment loan of $500 million with the World Bank.[13]

The economic reforms began in July 1991 with a sharp 18 per cent devaluation of the rupee. At the same time, the restrictive covenants in the IMF package meant that the government pledged to cut the fiscal deficit from 8.4 per cent in 1990/91 to 6.5 per cent in 1991/92, and to follow a restrictive monetary policy. As a result of the government policy interventions, foreign currency assets rose to approximately $4.2 billion by February 1992.[14] Macroeconomic balance was restored by the mid-1990s, with a sharp correction in the fiscal deficit-to-GDP ratio and the reduced monetization of deficits.[15] Simultaneously, the government undertook a wide range of structural reforms encompassing areas of trade, exchange rate management, industry, public finance, and the financial sector.[16]

MACROECONOMIC INDICATORS IN 25 YEARS

Growth

The gross domestic product (GDP) was the primary indicator of a country's economic health and could be taken as the proxy for its economic strength. The larger the GDP, the larger the dollar value of the goods and services produced in the economy over a specific time period. India's nominal GDP (i.e., GDP at current prices) grew from $280.8 billion in 1990/91 to $2,251 billion in 2015/16—a 702 per cent increase over the 25-year period.[17] In dollar terms, India crossed the $2 trillion mark for nominal GDP in 2013/14, and in 2015/16, it ranked seventh in the world in terms of nominal GDP (see Exhibit 1).[18]

The rate of growth of GDP demonstrated a sharper swing. After the reforms, India left behind its low economic growth trajectory of 3.0–3.5 per cent annual growth rate and became one of the fastest-growing economies in the world. Between 2005 and 2008, India's annual GDP growth rate exceeded 9 per cent

before it experienced a decline. Despite the decline, India was the second-fastest-growing economy, next only to China until 2015. In January 2015, India introduced a new GDP series,[19] which increased India's growth rate considerably and revealed a perceptible improvement in the economy's macro-aggregates in 2013/14 and 2014/15. The revised GDP series and the resultant higher growth rates, together with the slowdown experienced by the Chinese economy, led to India being declared the fastest-growing economy in the world, with a real GDP annual growth rate of 7.6 per cent in financial year (FY) 2015/16 (see Exhibit 1).[20] In 2016, amid a weakening global outlook, the managing director of the International Monetary Fund, Christine Lagarde, referred to India as the "bright spot in the global economy."[21]

The growth dynamics altered the structure of the Indian economy, both on the supply and demand sides.[22] In 2015/16, the service sector emerged as the largest contributor to GDP with a 61.9 per cent share. Agriculture and industry had shares of 15.4 per cent and 22.7 per cent, respectively.[23] However, the share of these sectors in the overall employment in India was extremely skewed, with agriculture accounting for 48.9 per cent, industry 24.3 per cent, and the service sector 26.9 per cent.[24]

The employment-intensive agricultural sector, even in 2016, continued to depend on the vagaries of the monsoon, as noted by consecutive economic surveys of the Government of India and annual reports of the RBI. The southwest monsoons, which were the chief source of rainfall in the country, determined the fate of the agricultural sector—and of the economy. Thus, after two consecutive subnormal monsoon years, the agricultural sector growth rate had faltered from 2013/14 to 2015/16 (see Exhibit 2).[25] The industrial sector's growth rate in 2015/16 marked an improvement over the previous two fiscal years, with much of this improvement accounted for by manufacturing. However, ground-level data seemed to be at odds with such results. For instance, while the new GDP series showed 5.6 per cent growth in manufacturing in 2013/14, actual performance of manufacturing companies listed on the National Stock Exchange showed that earnings had actually declined by 4 per cent in 2013/14.[26] The stagnating IIP[27] further raised questions regarding the veracity of the story of manufacturing growth (see Exhibit 3).[28] The services sector—the largest contributor to GDP—had experienced declining growth rates in 2015/16, with the slowdown concentrated in public administration, defence, and other services on account of the restraints on public expenditure. Other components of the service sector, such as trade, hotels, transport, communication, and services related to broadcasting, also decelerated.[29]

On the expenditure side, with a private final consumption expenditure-to-GDP ratio of 58.43 per cent[30] in 2015/16, India continued to be largely a consumption-driven economy. Several sectors gained from the rising prosperity of the middle class and its consequent accelerated consumption. Thus, the automobile sector witnessed rising sales, with the number of cars sold in India reaching 2.77 million by the end of 2015.[31] However, the biggest legacy of the post-1991 economy was the telecommunications revolution. In a country of 1.3 billion people, mobile phone subscriptions in India reached the 1 billion mark by January 2016. Buoyed by the advent of ultra-affordable devices and the world's cheapest call tariffs, India had become the second largest mobile-subscribing nation in the world, next only to China.[32]

The share of gross fixed capital formation—a major component of the investment expenditure in the country[33]—increased from 23.82 per cent of GDP to 29.48 per cent of GDP over the 25-year period. However, the rate of growth of gross fixed capital formation, which more than doubled from an annual average of 7.2 per cent in the 1990s to 15.7 per cent in the high-growth phase of 2004–2008, dropped to 4.07 per cent from 2013/14 to 2015/16. Government final consumption expenditure exhibited a moderate reduction from 11.86 per cent of GDP to 10.4 per cent of GDP over the 25-year period (see Exhibit 2).[34]

The per capita GDP figure (at constant 2010 prices) rose by 417 per cent—from $309 in 1991 to $1,598 in 2015[35] (see Exhibit 1). However, India could not be complacent with such growth in per capita income. As Raghuram Rajan, the former Governor of the Reserve Bank of India, India's central bank, stated:

> At one level, we are still a $1,500 per capita economy. All the way from $1,500 per capita to $50,000, which is where Singapore is, there is a lot of things to do. We are still a relatively poor economy and to wipe the tear from every eye, one would at least want to be middle-income around $6,000–$7,000, which, if reasonably distributed, will have dealt with extreme poverty. And that is two decades worth of work to be even moderately satisfied.[36]

Employment

An important concern with regard to the India growth story was the "employment potential" of such growth,[37] more so on account of the emergence of a "demographic dividend" for India, with a decrease in the dependency ratio and the median age of population estimated at 26.9.[38] Such growth in GDP, without similar growth in jobs and income would put pressure on consumption as the driver of growth. The government could focus on making growth more employment-intensive. An alternative was to introduce employment generation schemes, with their attendant consequences on the fiscal side.[39]

The post-liberalization period, 1993–2009, witnessed a decline in the employment growth to 1.7 per cent, compared with the 2.4 per cent achieved in 1972–1983 and 2 per cent growth rates achieved in 1983–1993. A growth in GDP, paradoxically, had an adverse effect on employment growth. In fact, commentators had termed the high-growth period of 2004/05 to 2009/10 as the period of "jobless growth"—a period when "job growth collapsed virtually to zero," with employment growth in the organized sector faring worse.[40] Aggregate employment elasticity calculated for the post-reform period indicated that a 10 per cent change in real GDP would change employment by 1.8 to 2.0 per cent; however, there were inter-sectoral differences. Employment elasticity was negative for the agricultural sector, while it was largest for the organized manufacturing sector, where a 10 per cent change in GDP growth would result in a 4.7 to 5.2 per cent change in employment.[41]

Government data released in 2016 indicated that employment generation had slowed to a seven-year low in 2015 in eight key sectors: gems and jewellery, textiles, leather, metals, automobiles, transport, information technology, and handloom products. Worse still, from October to December 2015, more than 20,000 people in these sectors had lost their jobs as a result of shrinking exports.[42] The 2014 Labor Bureau Survey reported a total unemployment rate of 4.9 per cent,[43] which was a clear deterioration from the 2.56 per cent and 2.81 per cent rates achieved in 1993/94 and 1999/2000, respectively.[44] Moreover, the youth unemployment rate was higher at 12.9 per cent.[45]

The Government of India's Economic Survey noted, "To exploit its demographic dividend, India must create enough 'good'—safe, productive, well paying jobs."[46] While such "good" jobs required a greater formalization of the economy, most jobs in India in the 1989–2010 period were created in the informal sector. Formal sector jobs offered pecuniary as well as non-pecuniary benefits for labour employed. Thus, the formal sector offered significantly higher wages compared with the informal sector. The average annual formal sector wage in 2010 was ₹122,794 ($2,695.2)[47] while the average informal sector wage was ₹6,058 ($133). Moreover, being engaged in the formal sector also provided access to cheaper credit for workers.[48]

However, restrictive labour laws posed challenges to formalization in India, even in 2016. Of particular significance was the *Industrial Disputes Act* (IDA), which required firms with more than 100 employees to seek government approval for retrenching labour. Most firms preferred to remain small, foregoing

significant economies of scale to avoid such "regulatory cholesterol." Further, firms sought to avoid cumbersome labour laws by hiring contract labour, which had its own ramifications. Such contractual labour was not only more expensive than regular labour but also less loyal to the firm and less productive, due to a non-accumulation of "firm-specific human capital."[49]

Savings and Investment

The Harrod-Domar Model was the theoretical model used to capture, for any economy, the relationships among savings, investment, and growth. According to this model, an economy's rate of growth depended on two factors: the economy's level of national saving (S) and its incremental capital–output ratio (ICOR).[50] The rate of gross domestic savings in an economy—i.e., the savings by domestic households, the government, and corporations (both financial and non-financial)—determined the domestic investment rate. The lower the domestic savings rate, the more the economy would need to depend on external savings to bridge the savings–investment (S–I) gap. A proxy for such external savings was the current account deficit. Thus, an economy that faced a higher S–I gap would run a higher current account deficit. The incremental capital-output ratio (ICOR) was "a summary expression for the existing technical conditions and structural configuration of the economy which captured the relationship between investment and additional output" [51] and thus measured the productivity of investment in an economy. There were sectoral differences in ICORs, with the aggregate ICOR for the entire economy calculated as a weighted average of the sectoral ICORs. In turn, sectoral ICORs depended on the sectoral composition of investment and growth, with the latter depending on several factors such as "the pattern of demand, the nature of inter-sectoral linkages, and the possibilities of trade."[52]

India experienced a substantial increase in the average savings rate, from 22.9 per cent of GDP in 1990/91 to approximately 31 per cent in the 2000s, with a peak saving rate of 36.8 per cent achieved during the high-growth phase of 2007/08 (see Exhibit 1). The government's policy of fiscal consolidation increased public sector savings significantly, and helped in increasing the overall savings rate in this phase. However, in the post-crisis period, the savings rate declined and stood at 31.1 per cent of GDP in 2015/16. While public sector savings decreased, the decline in household savings—both physical and financial—was the key factor responsible for the decline in gross domestic savings in the post-crisis period. Overall household savings as a proportion of GDP at current market prices declined from an average of 23.0 per cent over the period 2005/06 to 2007/08 to 18.7 per cent in 2014/15. Net household financial savings in particular dipped from a high of 12.0 per cent of GDP in 2009/10 to 7.1 per cent of GDP in 2012/13, due to lower economic activity and low or negative real returns during a period of high inflation. However, with the moderation in inflation and an increase in economic activity, the net financial savings of households improved to 7.7 per cent in 2015/16, although savings in physical assets and valuables dropped.[53]

The efficiency of capital utilization (i.e., the productivity of capital) improved as the ICOR declined to 3.7 per cent during the high-growth phase of 2004-08 from 5.0 per cent in the 1990s.[54] A large part of this rise in productivity was a result of the rising productivity of both the manufacturing and the services sectors in the post-1991 period, due to the liberal market reforms and the opening up of the economy.[55] However, capital efficiency declined in the post-crisis period, and the ICOR rose. The rise in the ICOR resulted from factors such as stalled projects, due in turn to land acquisition and environmental clearance issues, lack of complementary investments, and the non-availability of critical inputs.[56]

The Centre for Monitoring the Indian Economy, an Indian think tank, estimated that the proportion of stalled projects to the projects under implementation had increased from 11.91 per cent in June 2014 to 12.73 per cent in March 2016, with nearly 20 per cent of all private sector projects and 6 per cent of all government

projects under implementation being stalled. Sector-wise, power and manufacturing sector projects accounted for more than half of the total stalled projects, with services (other than financial) accounting for another 24 per cent.[57] With the ICOR depending on a host of factors, including technology, the availability of skilled labour, and the ease of doing business (compared with others in the region and with the best performers globally),[58] action would need to be taken on multiple fronts.

The rate of gross domestic capital formation (i.e., investment rates) fell from their peak of 39 per cent achieved in 2011/12 to 32.98 per cent in 2015/16 (see Exhibit 1). Some of the decline in investment rates could be attributed to the high cost of capital as a result of contractionary monetary policies. However, as noted by the Reserve Bank of India in its annual report, the decline in investment rates was due more to the delays in land acquisitions and environmental clearances, economic policy uncertainty, and decline in business confidence, rather than to the rising interest rates.[59]

Inflation

An important macroeconomic objective was price stability—i.e., having a low, stable, and sustainable rate of inflation. India achieved high growth in an environment of relative price stability as headline wholesale price index (WPI) inflation dropped to an annual average of 5.5 per cent in the 2000s from 10.3 per cent and 13.7 per cent, respectively, in 1990/91 and 1991/92. Consumer price inflation also dropped. The trends reversed in the post-crisis period, with headline WPI inflation averaging more than 7 per cent and the consumer price inflation crossing double digits during 2009–2011. Much of the inflation was driven by food inflation, with the rate of growth in food prices at almost 15.5 per cent during 2009-2011.[60]

In early 2011, India's Central Statistics Office (CSO) introduced a new series of national, monthly inflation measures, called the Consumer Price Index-Combined (CPI-C).[61] The RBI adopted the CPI-C as the headline measure of inflation in India in 2014.[62] Food and beverages accounted for the highest weightage in the CPI-C, at 45.86 per cent, and, as such, contributed to a major proportion of headline inflation.[63] However, the contributors to food inflation itself changed over time. For instance, in 2012/13, the spike in cereal prices was responsible for food inflation, while the 2013/14 inflation in food prices resulted from a spike in vegetable prices.[64]

In January 2014, the Expert Committee to Revise and Strengthen the Monetary Policy Framework (also called the Urjit Patel Committee) recommended a monetary policy framework based on flexible inflation targeting[65] and a disinflationary glide path of reducing CPI inflation gradually from 10 per cent in January 2014 to 8 per cent in January 2015 and 6 per cent in January 2016. Subsequently, CPI inflation would be kept at 4 per cent, with a band of +/−2 per cent.[66] On February 20, 2015, the government and the RBI signed a Monetary Policy Framework Agreement that formalized this framework for inflationary targeting.[67] Inflation moderated from April 2014 to December 2015, mainly as a result of three factors: the fall in global commodity prices, the government's supply side measures to ease food inflation, and the anti-inflationary monetary policy stance of the RBI as part of its new inflationary targeting regime.

The CPI-C declined from 9.4 per cent in 2013/14 to 4.9 per cent in 2015/16 (see Exhibit 4). From September 2015 to January 2016, the price of pulses rose, which led to the headline inflation reaching 5.7 per cent in January 2016. In the first quarter of 2016/17, prices rose for vegetables, sugar, protein-rich items, and fruits. These price increases were accompanied by the pass-through of higher global crude oil prices to the prices of petrol and diesel. Consequently, inflation recorded a 23-month high at 6.1 per cent in July 2016.

The External Sector

India also underwent a change during this period in terms of openness. India had been a closed economy prior to 1990/91, with exports and imports of goods and services accounting for 15.24 per cent of GDP (of which exports were 6.93 per cent). This share rose to 56.4 per cent in 2012/13, before reducing to 43.5 per cent in 2015/16. The rise in openness (measured as current receipts and payments *plus* capital receipts and payments to GDP) was more dramatic, increasing from 42.0 per cent of GDP in the 1990s to 113.3 per cent in 2013/14, when the trade flows were considered along with the capital flows.[68] Such increased openness of the Indian economy led to India's trade and industrial cycles becoming more synchronized with the global business cycle.[69]

In 2015/16, India's greater integration with the global economy manifested itself in a contraction of merchandise exports, as the global economy witnessed a slump in commodity prices, weak global demand, and a surge in protectionist measures across advanced and emerging economies. With several key exports experiencing a decline in terms of both value and volume, overall exports declined by 15.5 per cent to $262.3 billion. With global oil prices declining, refined petroleum exports, accounting for about 11.6 per cent of India's exports, shrunk by approximately 50 per cent. Similarly, weakening demand in key markets led to a decline in other key non-oil exports, such as engineering goods and gems and jewellery, with shares of 23.1 per cent and 15 per cent, respectively, in India's total exports. These sectors experienced declines of about 18 per cent and 5 per cent, respectively. Exports, which expanded for the first time in 19 months in June 2016, again declined in July 2016.[70]

The price of imported crude oil—the key component of India's merchandise imports—reduced sharply by 45 per cent in 2015/16, leading to a reduction in the oil import bill. India's merchandise imports thus contracted by 15 per cent to $381.0 billion in 2015/16.[71] The other major component of imports—gold—fell by 16 per cent, owing to higher gold prices and a strike by Indian jewellers to protest the reintroduction of the excise duty on gold jewellery.[72] Non-oil, non-gold imports, including project goods, transport equipment, iron and steel, chemicals, pearls and stone, and ores and coal, recorded a broad-based decline. Net invisibles (i.e., transactions that did not involve the transfer of tangible goods, such as services, primary income, and remittances) witnessed a decline, partly as a result of a fall in the remittances. However, as a result of the sharp fall in the merchandise trade deficit, India's current account deficit (CAD) narrowed to 1.1 per cent of the GDP in 2015/16, the lowest since 2007/08. [73]

As a closed economy, India had negligible foreign investment prior to 1991. The first year of reform saw a total foreign investment of only $103 million.[74] However, investments rose steadily after the initial years, except for occasional blips between 1997 and 2000, and between 2008 and 2012—as a result of the global economic slowdown. Between 2000 and March 2016, India received total foreign direct investment (FDI) inflows of $424.17 billion. These payments were in addition to the inflows from foreign institutional investors, which amounted to $187.07 billion over the same period (see Exhibit 5).[75]

In 2015/16, India witnessed net FDI inflows of $36 billion in response to governmental measures such as raising the ceiling for FDI investment in several important sectors, rationalizing and simplifying procedures, and the Make in India initiative. However, net portfolio flows—a key component of the financial account of the balance of payments—turned negative during the year. India was no different from other emerging markets, which experienced a sell-off of portfolio investments due to "concerns about interest rates rising in the US and diverging monetary policy stances in other advanced economies, the slowdown in key emerging markets and heightened geo-political tensions."[76] Questions regarding the financing of the CAD arose as a result of estimated net outflows of portfolio investments of $3.5 billion from the equity market and of $0.5 billion from debt markets. At the same time, other debt-creating flows such as external commercial borrowings

and trade credits were also negative, although deposits by non-resident Indians increased by $16 billion during the year.

India's foreign exchange reserves had been the immediate trigger for the new economic policy of 1991. The reserves, which stood at $5.834 billion in 1990/91, had increased to $360.18 billion in 2015/16.[77] An important indicator of the stability of currency was the import cover (i.e., the number of months of imports that such reserves could cover). The import cover of reserves increased from 2.5 months in 1990/91 to 16.9 months in 2003/04, then reduced to seven months in 2012/13 during the currency crisis, before finally rising to 10.9 months in 2015/16. The rupee had witnessed a steep depreciation from ₹17.9 to a U.S. dollar in 1990/91 to ₹65.5 in 2015/16 (see Exhibit 5). As the economy expanded, so did the country's external debt. Thus, external debt of $20.9 billion in 1991 rose to $53.96 billion in absolute terms in 2016, although the external debt-to-GDP ratio had actually declined, from 30.4 per cent in 1991 to 23.7 per cent in March 2016.[78]

Fiscal and Other Deficit Indicators

The Union Budget in India, which outlined the central government's fiscal operations, documented the various heads of government revenues and expenditures, and the deficit indicators arising from the government's operations. Three key deficit indicators attested to the health of the government finances: fiscal deficit, revenue deficit, and primary deficit. The fiscal deficit referred to the difference between the revenue receipts plus the non-debt capital receipts and the total expenditure, to be bridged through borrowings and other liabilities. Accumulated fiscal deficit led to government debt and raised issues of financing. A high fiscal deficit, when financed through government borrowings, led to a crowding out of the private sector borrowings,[79] while monetization of deficits had an inflationary impact. Revenue deficit referred to the excess of revenue expenditure over revenue receipts, and was a measure of the government's dissavings. Primary deficit, measured by fiscal deficit less interest payments, was a measure of the government's debt sustainability.[80]

Prudent fiscal management required paying attention not only to the quantity of fiscal deficit but also to the quality of financing the deficit. The latter required greater recourse to direct tax receipts and a greater proportion of expenditure on productive capital outlays rather than the unproductive and short-term revenue expenditure. Moreover, fiscal prudence required adherence to the "golden rule" of eliminating the revenue deficit and ensuring that borrowing over the fiscal cycle was only for capital formation.[81] It further required eliminating the primary deficit and moving toward a scenario of a primary surplus.

The 25-year period witnessed a gradual improvement in the fiscal position. Starting with a high fiscal deficit of 7.61 per cent of GDP in 1990/91, the fiscal deficit sharply moderated during the high-growth phase of 2004–08. The government committed itself to a rule-based fiscal consolidation process with the enactment of the *Fiscal Responsibility and Budget Management (FRBM) Act, 2003*. The post-2008 period witnessed significant fiscal expansion to avoid the negative impact of the global financial crisis, which led to a worsening of the fiscal deficit, revenue deficit, and primary deficit indicators (see Exhibit 4). In 2015/16, the fiscal deficit had been reduced to 3.94 per cent. However, the growth in tax revenues as a percentage of GDP and the relative proportion of capital to revenue expenditures raised questions regarding the quality of such fiscal deficit.

More importantly, India's general government fiscal deficit ratio of 6.6 per cent in 2014 and debt of 67.1 per cent were considered relatively high and out of line with its emerging market "peers," leading to Standard & Poor's rating India as BBB⁻, despite its dramatic improvement in growth and macroeconomic stability since 2014.[82]

The Financial Sector

Although the proportion of Indian population operating in the share market was small, the volatility in the Bombay Stock Exchange (BSE) Sensitive Index (Sensex, also called the BSE 30) reflected the economic and political scenario prevailing in the country. The 30-share BSE Sensex was at approximately the 1,000-level mark in 1991, before crossing the 4,000 mark in 1992. However, the stock market scam in 1992 brought about a downturn, with markets ending 1992/93 below the 4,000 mark. After reaching a high point of 15,644 by the end of 2007/08, the Sensex fell 38 per cent to 9,708.50 points by the end of 2008/09. Since then, the Sensex rose steadily to reach 25,341.86 points by the end of 2016.[83]

The 25-year period witnessed a financial deepening of the economy. One measure of such deepening was the rise in the ratio of broad money (M3) to GDP from 49.90 per cent in 1990/91 to 85.84 per cent in 2015/16.[84] The increase in money supply had remained contained during the 2001–2010 period, with the ratio at 74.3 per cent even during the high growth phase of 2004–2008. The monetary easing post-2008 pushed the average M3-to-GDP ratio to 85 per cent,[85] which in turn affected the price stability (see Exhibit 4).

The spread of the bank branch network after bank nationalization in two rounds, in 1969 and 1980, led to a decline in the share of currency in broad money during 1970–2000,[86] and a concomitant rise in the share of bank deposits. Despite this situation, cash remained an important mode of payment in the Indian economy, especially in rural India. Thus, the ratio of currency to GDP at current market prices (C ÷ GDP), which was an indicator of the role of currency in economic activity, increased from 10.30 per cent in 1990/91 to 12.25 per cent in 2015/16.[87] At the end of March 2016, the value of banknotes in circulation was ₹ 16,415 billion. In value terms, ₹ 500 and ₹ 1,000 banknotes together accounted for 86.4 per cent of the total value of banknotes in circulation; by volume, ₹ 10 and ₹ 100 banknotes constituted 53 per cent of the total banknotes in circulation.

The high volume of cash transactions was cited as the primary reason for the presence of a black economy in India. Various studies, including those by McKinsey and the Bank of America-Merrill Lynch study, estimated the share of the black economy in India as representing roughly a quarter of India's GDP.[88] Corruption was rampant, and the Transparency International's Corruption Perception Index ranked India as 79th among 176 countries in terms of corruption perception, with a score of 40. Such corruption and inequality were found to be linked in a vicious circle.[89]

An important development in the Indian financial sector in 2016 was the emergence of the "twin balance sheet" problem, where the balance sheets of both the banking and corporate sectors were stressed because they contained a high proportion of non-performing assets. The Indian Economic Survey noted that India demonstrated "the highest degree of stress in the world."[90] Thus, India's non-performing asset (NPA) ratio of 9.1 per cent of gross loans was higher than any other major emerging market (except Russia). More than 80 per cent of the non-performing assets were in the public sector banks, where the NPA ratio had reached almost 12 per cent. At the same time, approximately 40 per cent of the corporate debt was owed by companies that had an interest coverage ratio of less than one, meaning they did not earn enough to pay the interest obligations on their loans.[91]

LOOKING AHEAD

The 25 years of Indian reforms coincided with international geopolitical developments, including the economic slowdown in China, the weakening of the European Union, Brexit, and the advanced economies slowly losing their clout. In 2016, the Indian economy thus seemed better placed to reach new heights.

However, domestic structural challenges remained, as did challenges from external sector developments. Domestic structural challenges revolved around reducing the scope of the state, increasing the "embrace of the markets," and managing the trade-off between growth and inflation. At the same time, the global context led to cautionary developments, including higher interest rates in the United States, a lower "political carrying capacity for globalization" and the resultant protectionist policies, and a successful rebalancing in China. What did the 25th year of turnaround bode for India? Were the macroeconomic indicators strong enough to be sustainable? How should one interpret the increase in GDP growth rates, the reduction in the CAD, and the reduction in the fiscal deficit? Should investors be confident about India's growth story in 2016?

EXHIBIT 1: INDIA'S NATIONAL INCOME ACCOUNTS, SELECTED YEARS, 1990/91 TO 2015/16

Year	GROWTH INDICATORS			SAVING–INVESTMENT INDICATORS		
	Nominal GDP at Current Prices (in US$ billions)	Annual GDP Growth Rate (per cent)	GDP per Capita (in current US$)	Rate of Gross Domestic Savings (per cent)	Rate of Gross Domestic Capital Formation (Investment) (per cent)	S–I Gap
1990/91	280.88	5.3	309.33	22.9	26.0	–3.1
1991/92	282.08	1.4	323.53	21.3	21.8	–0.5
2000/01	468.30	4.1	460.83	23.7	24.3	–0.6
2001/02	489.61	5.4	480.26	24.8	24.2	0.6
2002/03	573.37	3.9	557.90	25.9	24.8	1.1
2003/04	693.73	8.0	640.60	29.0	26.8	2.2
2004/05	812.06	7.1	729.00	32.4	32.8	–0.4
2007/08	1,254.80	9.3	991.52	36.8	38.1	–1.3
2010/11	1,871.86	8.9	1,461.38	33.7	36.5	–2.8
2013/14	2,046.26	6.6	1,576.82	32.1	34.7	–2.6
2014/15	2,116.24	7.2	1,598.26	33.0	34.2	–1.2
2015/16	2,251.00	7.6	NA	31.1	32.9	–1.8

Note: GDP = gross domestic product; S–I = savings–investment; NA = not applicable; the GDP growth rates and the rate of gross domestic savings for years 1990/91 to 2012/13 are calculated on a base year of 2004/05; the figures for 2013/14 onward are calculated on a base year of 2011/12; the S–I gap is based on the author's calculations.
Source: "National Accounts Main Aggregates Database, Country Profile India, 1990-2015," United Nations, accessed January 25, 2017, https://unstats.un.org/unsd/snaama/resQuery.asp; "GDP per Capita (Current US$), 1960–2015," The World Bank, accessed January 27, 2017, http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=IN; "Database on Indian Economy," Reserve Bank of India, accessed January 5, 2017, https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications; Government of India, Central Statistics Office, Ministry of Statistics & Programme Implementation, *Press Note on First Revised Estimates of National Income, Consumption expenditure, Saving, and Capital Formation, 2015–16* press release, January 31, 2017, accessed February 3, 2017, www.mospi.gov.in/sites/default/files/press_release/nad_PR_31jan17.pdf.

EXHIBIT 2: GROWTH RATES AND COMPOSITION OF INDIA'S REAL GROSS DOMESTIC PRODUCT, SELECTED YEARS, 1990/91 TO 2015/16 (BY %)

Sector	Growth Rate at Constant Prices					Share in GDP at Current Prices				
	1990/91*	2007/08*	2013/14**	2014/15**	2015/16**	1990/91	2007/08	2013/14	2014/15	2015/16
	Expenditure-Side GDP									
1. Private Final Consumption Expenditure	4.47	9.36	6.8	6.2	7.4	67.98	56.96	58.00	57.92	58.43
2. Government Final Consumption Expenditure	3.40	9.57	0.4	12.8	2.2	11.86	10.29	10.25	10.40	10.40
3. Gross Fixed Capital Formation	13.60	16.20	3.4	4.9	3.9	23.82	32.92	31.15	30.30	29.48
4. Change in Stocks	–6.21	31.34	–18.6	20.3	5.5	1.08	4.04	1.51	2.47	2.22
5. Valuables	NA	2.90	–42.2	15.4	0.3	0	1.07	1.43	1.68	1.45
6. a) Exports	11.10	5.93	7.8	1.7	–5.2	6.93	20.43	25.34	22.93	20.10
b) Less Imports	3.37	10.19	–8.2	0.8	–2.8	8.31	24.45	28.31	25.91	22.43
7. Discrepancies	64.20	111.77	–162.5	–20.0	–708.9	–3.38	–1.27	0.30	–0.13	1.12
8. GDP at Constant Market Prices	**5.53**	**9.80**	**6.6**	**7.2**	**7.6**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

EXHIBIT 2 (CONTINUED)

GVA at Basic Prices (Supply Side)										
	Growth Rate at Constant Prices					Share of GDP at Constant Market Prices				
1. Agriculture, forestry, and fishing	4.02	5.80	4.20	–0.20	1.20	29.53	16.81	17.50	16.30	15.40
2. Industry	5.88	9.25	5.20	6.50	8.80	20.56	20.65	22.50	22.40	22.70
comprising:										
a) Mining and quarrying	10.46	3.69	3.00	10.80	7.40	3.48	2.46	2.90	3.00	3.10
b) Manufacturing	4.77	10.28	5.60	5.50	9.30	15.08	16.14	17.40	17.10	17.50
c) Electricity, gas, water supply, & other utility services	6.68	8.27	4.70	8.00	6.60	2.00	2.04	2.20	2.20	2.20
3. Services	6.08	10.34	7.30	9.40	8.20	49.61	62.54	60.00	61.30	61.90
comprising:										
a) Construction	11.79	10.78	4.60	4.40	3.90	7.06	8.10	9.00	8.80	8.50
b) Trade, hotels, transport, communication, and services related to broadcasting	5.16	10.93	7.80	9.80	9.00	17.64	25.91	18.40	18.90	19.20
c) Financial, real estate, & professional services	6.21	11.95	10.10	10.60	10.30	11.51	16.12	20.30	21.00	21.60
d) Public administration, defence, and other services	–	–	4.50	10.70	6.60	–	–	12.30	12.70	12.60
e) Community, social, & personal services	4.36	6.87	11.03	11.33	10.76	13.40	12.42	20.52	21.34	22.05
5. GDP at constant market prices	**5.29**	**6.80**	**6.30**	**7.10**	**7.20**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note: GDP = gross domestic product; NA = not applicable; GVA = gross value added
Source: Reserve Bank of India, *Handbook of Statistics on the Indian Economy*, accessed June 27, 2017, https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications; Reserve Bank of India, "Annual Report 2015–16," August 29, 2016, accessed June 27, 2017, https://www.rbi.org.in/scripts/AnnualReportPublications.aspx?Id=1187.

EXHIBIT 3: INDIA'S INDEX OF INDUSTRIAL PRODUCTION, 2012/13 TO 2015/16

Industry Group	Weight in IIP	Growth Rate (per cent)				April–June	
		2012/13	2013/14	2014/15	2015/16	2015	2016
Overall IIP	100.0	1.1	–0.1	2.8	2.4	3.3	0.6
Mining	14.2	–2.3	–0.6	1.5	2.2	0.4	2.3
Manufacturing	75.5	1.3	–0.8	2.3	2.0	3.7	–0.7
Electricity	10.3	4.0	6.1	8.4	5.7	2.3	9.0
Use-Based							
Basic Goods	45.7	2.5	2.1	7.0	3.6	4.7	4.8
Capital Goods	8.8	–6.0	–3.6	6.4	–2.9	2.0	–18.0
Intermediate Goods	15.7	1.6	3.1	1.7	2.5	1.6	4.1
Consumer Goods	29.8	2.4	–2.8	–3.4	3.0	2.5	0.6
Consumer Durables	8.5	2.0	–12.2	–12.6	11.3	3.7	7.8
Consumer Non-durables	21.3	2.8	4.8	2.8	–1.8	1.7	–4.1

Note: IIP = Index of Industrial Production.
Source: Reserve Bank of India, Annual Report (2015–16), August 29, 2016, accessed February 2, 2017, https://www.rbi.org.in/scripts/AnnualReportPublications.aspx?year=2016.

EXHIBIT 4: PRICES, MONETARY, AND FINANCIAL SECTOR VARIABLES IN THE INDIAN ECONOMY, SELECTED YEARS, 1990/91 TO 2015/16

Year	M1/GDP (per cent)	M3/GDP (per cent)	INFLATION INDICATORS	
			WPI	CPI
1990/91	17.47	49.99	10.3	11.6
1991/92	18.65	51.68	13.7	13.5
1995/96	19.21	53.57	8.0	10.2
2000/01	18.96	65.64	7.2	3.8
2007/08	25.22	87.69	4.7	6.2
2008/09	23.75	90.41	8.1	9.1
2009/10	24.38	91.71	3.8	12.2
2010/11	22.60	89.73	9.6	10.4
2011/12	19.89	84.53	8.9	8.4
2012/13	19.08	84.35	7.4	10.0
2013/14	18.33	84.70	6.0	9.4
2014/15	18.44	84.85	2.0	5.8
2015/16	19.03	84.95	–2.5	4.9

Note: M1 = currency held by the public + chequing accounts + demand deposits (the narrowest measure of the money supply); GDP = gross domestic product; M3 = M1 + savings deposits + certificates of deposit + time deposits (the broadest measure of the money supply); WPI = wholesale price index; CPI = consumer price index
Source: Reserve Bank of India, *Handbook of Statistics on the Indian Economy,* accessed February 5, 2017, https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications.

EXHIBIT 5: THE INDIAN ECONOMY'S EXTERNAL SECTOR INDICATORS, SELECTED YEARS, 1990/91 TO 2015/16

Year	Total FDI Flows	Investment by FIIs	Total Foreign Exchange Reserves (US$ millions)	Import Cover of Reserves (in months)	₹/$ Exchange Rate	CAD
1990/91	97	6	5,834	2.5	17.94	–3.0
1991/92	129	4	9,220	5.3	24.47	–0.4
1995/96	2,144	2,748	21,687	6.0	33.45	–1.7
2000/01	4,029	1,847	42,281	8.8	45.68	–0.6
2001/02	6,130	1,505	54,106	11.5	47.69	0.7
2002/03	5,035	377	76,100	14.2	48.39	1.3
2003/04	4,322	10,918	112,959	16.9	45.95	2.3
2004/05	6,051	8,686	141,514	14.3	44.93	–0.3
2007/08	34,843	20,328	309,723	14.4	40.26	–1.3
2008/09	41,873	–15,017	251,985	9.8	45.99	–2.3
2009/10	37745	29048	279057	11.1	47.44	-2.8
2010/11	34,847	29,422	304,818	9.5	45.56	–2.8
2012/13	34,298	27,582	292,046	7.0	54.40	–4.8
2013/14	36,046	5,009	304,223	7.8	60.50	–1.7
2014/15	45,148	40,923	341,638	8.9	61.14	–1.3
2015/16	55,457	–3,516	360,176	10.9	65.47	–1.1

Note: FDI = foreign direct investment; FIIs = foreign institutional investors; ₹ = rupees; CAD = current account deficit
Source: Reserve Bank of India, *Handbook of Statistics on the Indian Economy*, accessed January 2, 2017, https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications.

EXHIBIT 6: SELECT FISCAL INDICATORS OF THE INDIAN CENTRAL GOVERNMENT, SELECTED YEARS, 1990/91 TO 2015/16 (AS A % OF GDP)

Year	Gross Fiscal Deficit	Revenue Deficit	Gross Primary Deficit	Gross Tax			Tax Revenue Net	Revenue Expenditure	Interest Payments	Capital Expenditure	Capital Outlay	Total Expenditure
				Direct	Indirect	Total						
1990/91	7.61	3.17	3.95	1.88	7.94	9.82	7.33	12.54	3.67	5.42	2.07	17.96
1991/92	5.39	2.41	1.44	2.26	7.74	10.00	7.43	12.21	3.95	4.32	1.64	16.53
1995/96	4.91	2.42	0.83	2.74	6.33	9.07	6.68	11.40	4.08	3.13	1.15	14.53
2000/01	5.46	3.91	0.90	3.14	5.51	8.65	6.28	12.76	4.56	2.19	1.14	14.95
2007/08	2.54	1.05	–0.88	6.26	5.63	11.89	8.81	11.92	3.43	2.37	2.14	14.29
2008/09	5.99	4.50	2.57	5.93	4.81	10.75	7.87	14.10	3.41	1.60	1.35	15.70
2010/11	4.80	3.24	1.79	5.73	4.46	10.19	7.32	13.37	3.01	2.01	1.69	15.38
2013/14	4.46	3.17	1.14	5.66	4.43	10.10	7.24	12.17	3.32	1.66	1.49	13.83
2014/15	4.09	2.93	0.87	5.57	4.40	9.97	7.24	11.75	3.22	1.57	1.34	13.32
2015/16	3.94	2.52	0.68	5.54	5.21	10.76	6.98	11.40	3.26	1.75	1.56	13.15

Source: Reserve Bank of India, *Handbook of Statistics on the Indian Economy,* accessed February 23, 2017, https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications.

ENDNOTES

[1] This case has been written on the basis of published sources only. Consequently, the interpretation and perspectives presented in this case are not necessarily those of the Government of India or any of its employees.
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[4] This section is based on the Government of India, Economic Survey, 1991–92 A, accessed December 14, 2016, http://indiabudget.nic.in/es1991-92_A/esmain.htm.
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[9] Government of India, op. cit., 10.
[10] In this government, P. V. Narasimha Rao was the prime minister, and Dr. Manmohan Singh, the finance minister.
[11] Government of India, op. cit., 11.
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[13] Government of India, op cit.
[14] Ibid.
[15] The central government's fiscal-deficit to gross domestic product ratio was brought down from its peak of 8.13 per cent in 1986–87 to 4.91 per cent in 1995–96; Ibid.
[16] Mohanty, op. cit.
[17] "National Accounts Main Aggregates Database, Country Profile India, 1990–2015," United Nations, accessed January 25, 2017, https://unstats.un.org/unsd/snaama/resQuery.asp; "GDP of India," Statistics Times, http://statisticstimes.com/economy/gdp-of-india.php. The nominal GDP in rupee terms rose from INR5,318.13 billion in 1990/91 to INR136,753.31 billion in 2015/16, representing a 2,471 per cent increase.
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[22] The supply side views the sectoral composition of GDP (i.e., agriculture, industry, and services), while the demand side looks at the expenditure side (i.e., Y = C + I + G + X – M, where Y = GDP, C = consumption, I = investment, G = government spending, X = exports, M = imports).
[23] Reserve Bank of India, "Annual Report 2015–16," August 29, 2016, accessed February 2, 2017, https://www.rbi.org.in/scripts/AnnualReportPublications.aspx?year=2016. The shares of the agriculture, industry, and service sectors were 28.4 per cent, 20.1 per cent, and 51.5 per cent of the GDP, respectively, over the period 1990–2000.
[24] Government of India, Economic Survey, 2014–15, op. cit; Government of India, "State of the Economy: An Overview," in *Economic Survey 2014–15*, accessed February 6, 2017, http://indiabudget.nic.in/budget2015-2016/es2014-15/echapvol2-01.pdf.
[25] Reserve Bank of India, Annual Report, 2015–16, op. cit.
[26] Radhika Merwin, "What's Different about the New GDP," *Hindu Business Line*, March 8, 2015, accessed February 14, 2017, http://premium.thehindubusinessline.com/portfolio/whats-different-about-the-new-gdp/article6971890.ece.
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[29] Reserve Bank of India, "Annual Report 2015–16," op. cit.

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[33] Investment was defined as gross fixed capital formation + change in stocks + valuables.

[34] "Database on Indian Economy," Reserve Bank of India, accessed January 5, 2017, https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications; Mohanty, op. cit.

[35] The increase in terms of rupees was far more significant, a 1,392 per cent increase. "GDP per Capita (Constant 2010 US$)," The World Bank, accessed January 27, 2017, http://data.worldbank.org/indicator/NY.GDP.PCAP.KD?locations=IN.

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[47] ₹ = INR = Indian rupee; all currency amounts are in ₹ unless otherwise stated; ₹1 = US$0.02 on March 31, 2011.

[48] Government of India, Economic Survey, 2015–16, accessed February 25, 2017, http://indiabudget.nic.in/budget2016-2017/survey.asp.

[49] One estimate pointed out that contractual labour was 14 times more expensive than regular labour; Ibid., 144.

[50] The incremental capital–output ratio (ICOR), which referred to the productivity of capital was the ratio of the real investment rate and the real growth rate. Rate of growth = Investment rate ÷ ICOR. Hence, the rate of growth = (rate of gross domestic savings + current account deficit (CAD)) ÷ ICOR. "Herrod-Domar Model of Economic Growth," Economic Discussion, accessed June 28, 2017, www.economicsdiscussion.net/economic-growth/harrod-domar-model-of-economic-growth/26330.

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