Ref: Samuelson, P. & Nordhaus, W.: Economics, Indian Adaptation, 19th Edition

MEASURING ECONOMIC SUCCESS IN INDIA

Long-term Trends in Aggregate Output and Income

Figures 19A-1 and 19A-2 show how the growth rates of aggregate output (measured by real GDP) and the absolute per capita real income (measured by per capita real GNP) have behaved in India since 1950-51. The growth rate of real GDP has fluctuated significantly from year to year. Despite these short-term fluctuations, certain longer term trends are discernible. As Figure 19A-1 suggests and as statistical exercises have shown, the structural rule, the turning point occurs in 1951-52. In fact, the structural break in the early 1950s was more significant than around 1980.[2] India adopted a planning strategy in the early 1950s and has later significantly deviated from it particularly since the early 1990s (see the appendix to Chapter 26). The successes and failures of the earlier planning strategy and the economic liberalization since 1991 have been intensely debated in India and elsewhere. Even if one were to accept some of the failures of the planning strategy, the fact remains that it did succeed in lifting the economy out of near stagnation during the colonial period. And even if one were to

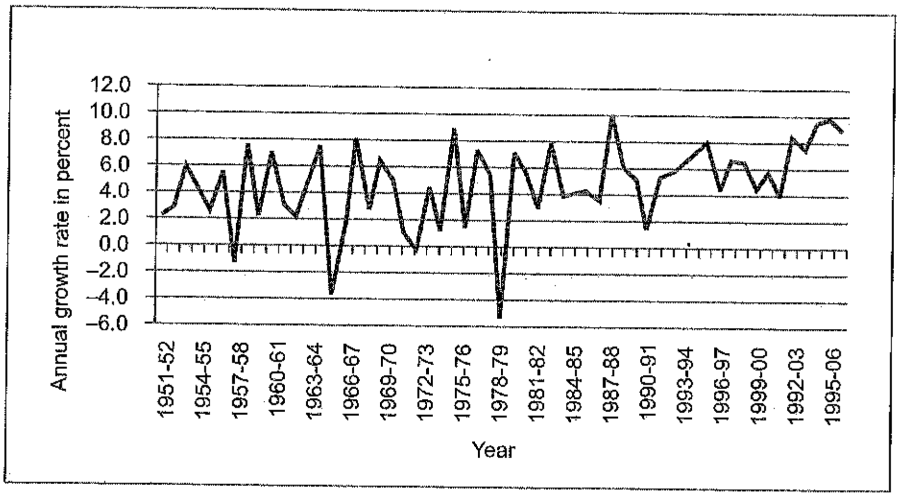

FIGURE 19A-1. Growth Rate of Real GDP, India, 1951-2008

Source: *National Accounts Statistics*, available at the website of the Ministry of Statistics and Programme Implementation, Government of India, www.mospi.gov.in. Real GDP is at factor cost at 1999-2000 prices.

break in economic performance and growth in India occurred around 1980. The trend of growth is much higher in the period since then compared to that in the earlier period since 1950-51. Per capita income too shows a sharp upward turn since around 1980[1] (Figure 19A-2).

If one takes a longer perspective and considers the entire twentieth century including the period till 1947 when India was under British

[1] See Deepak Nayyar, "India's Unfinished Journey: Transforming Growth into Development", in *Modern Asian Studies*, Vol. 40, No. 3, 2006; and Pulapre Balakrishnan and M. Parameswaran, "Understanding Economic Growth in India: A Prerequisite", in *Economic and Political Weekly*, July 14, 2007. The latter study shows that whereas the economy-wide growth rate accelerated in 1979-80, the structural breaks in the growth of agriculture, industry, and services happened in mid-1960s, early 1980s, and mid-1970s respectively.

[2] Neeraj Hatekar and Ambrish Dongre, "Structural Breaks in India's Growth: Revisiting the Debate with a Longer Perspective", in *Economic and Political Weekly*, April 2, 2005.

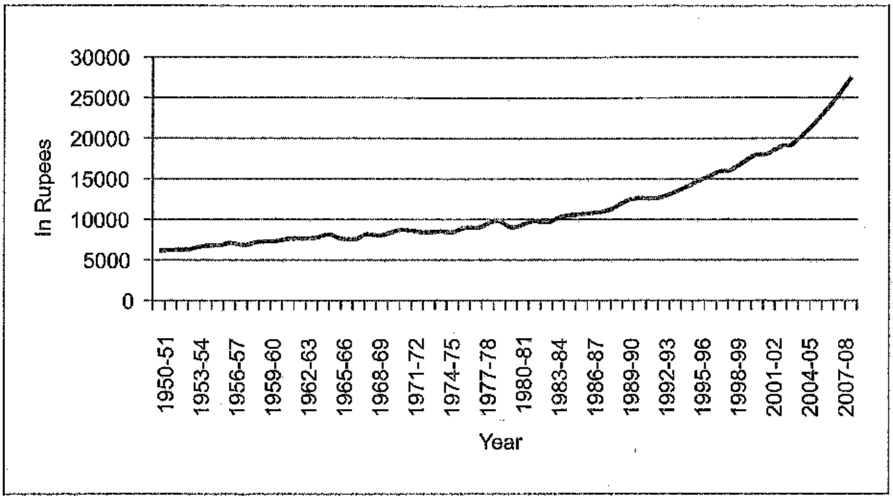

FIGURE 19A-2. Per Capita Real GNP, India, 1951-2008

Source: Reserve Bank of India, *Handbook of Statistics on Indian Economy*, available at the website of RBI, www.rbi.org.in. Real GNP at factor cost at 1999-2000 prices.

accept some of the successes of economic liberalization since 1991, the fact is that there must have been other factors contributing to growth because the economic turnaround happened about 10 years earlier.

Fluctuations in Agricultural Output

The growth rate has fluctuated in each of the main sectors, viz., agriculture, industry, and services[3] but there are substantial differences in the behavior (see Figures 19A-3, 19A-4 and 19A-5). In industry and services, during downturns, actual output goes below the potential output with capacities available remaining underutilized. But agricultural production in India is more supply-determined than demand-determined. Due to deficiencies in irrigation facilities in vast tracts of agricultural land in India, farmers depend on rainfall for the supply of the important input of water. Either too little rain or too much rain negatively influences agricultural production and supply. Agriculture experienced negative growth rates, i.e., real output actually fell in several years (Figure 19A-3). This has been a very disappointing aspect of India's economic performance particularly because more than half of India's population still relies on agriculture for livelihood.

Structural Change

Figures 19A-3, 19A-4 and 19A-5 show the behavior of growth rates in the three main sectors of agriculture, industry, and services. Due to differential rates of growth, a significant structural change has taken place in India's GDP. In 1950-51, agriculture, industry, and services sectors accounted for 55%, 15%, and 30% respectively. By 2007-08, whereas the share of agriculture fell drastically to 18%, that of services increased sharply to 56%. Industry's share rose moderately to 26% (Figure 19A-6). Industry's share, in fact, has stagnated the last few decades. Thus, so far as GDP is concerned, India has a structure similar to that of developed countries such

[3] See the Appendix to Chapter 20 for the product composition of these sectors.

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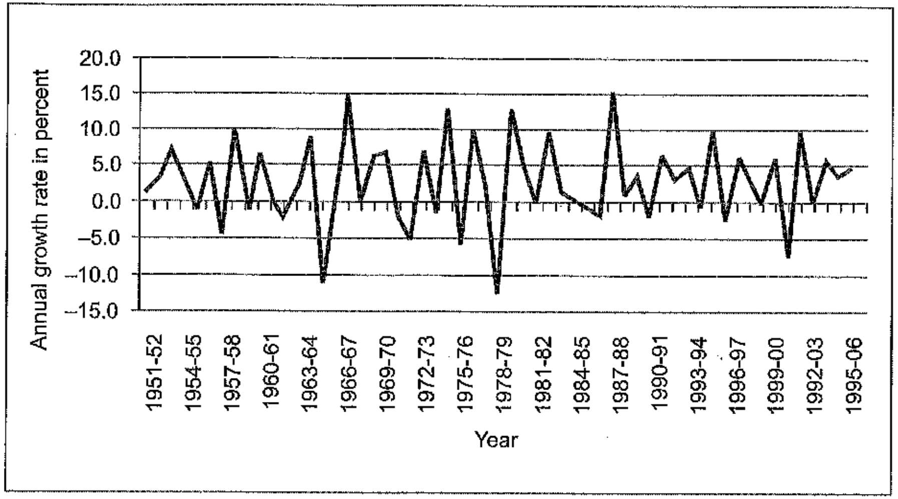
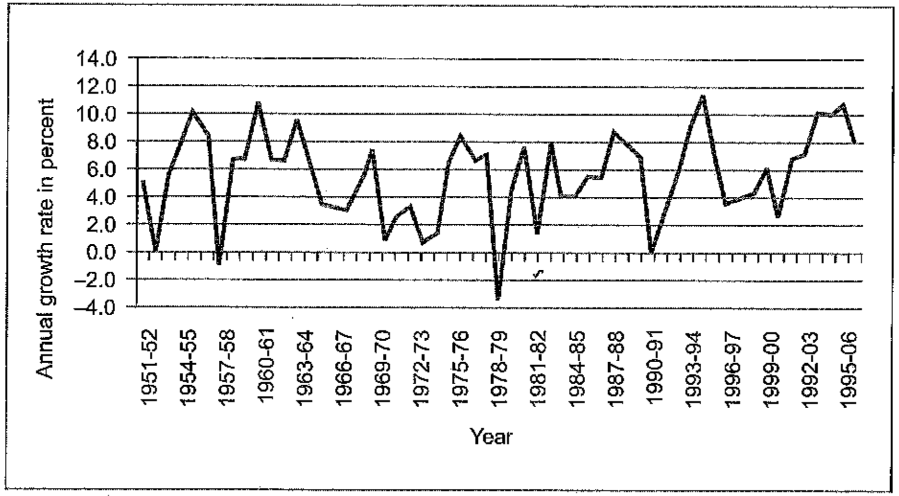


FIGURE 19A-3. Grawth Rate of Agriculture, India, 1951-2008

Source: Same as in Figure 19A-1. Real growth at 1999-2000 prices at factor cost.



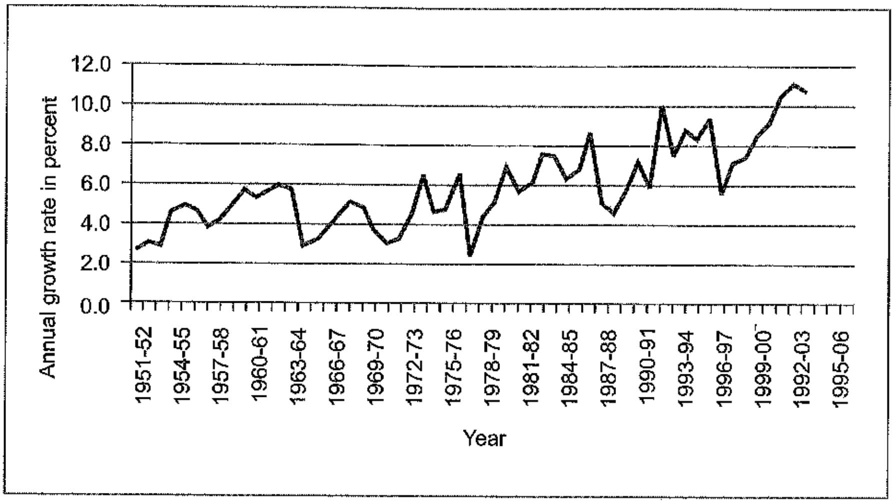


FIGURE 19A-5. Growth Rate of Services, India, 1951-2008

Source: Same as in Figure 19A-1. Real growth at 1999-2000 prices at factor cost.

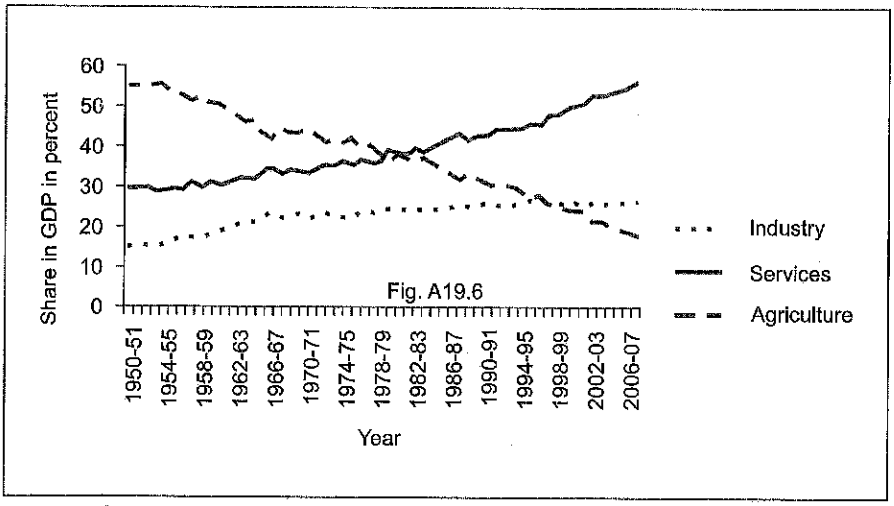


FIGURE 19A-6. Structural Change in India's Real GDP

Source: Same as in Figure 19A-1. Real GDP at factor cost at 1990-2000 prices.

Recent Trends in GDP

Currently, India's GDP growth rate (averaging around 9% the last few years) is among the highest in the world (Figure 19A-1). The main engines of growth have been the industrial sector and particularly the services sector with agriculture lagging behind (Figures 19A-3, 19A-4, and 19A-5).

Inflation

Several price indexes are in use in India, but the most common one is the Wholesale Price

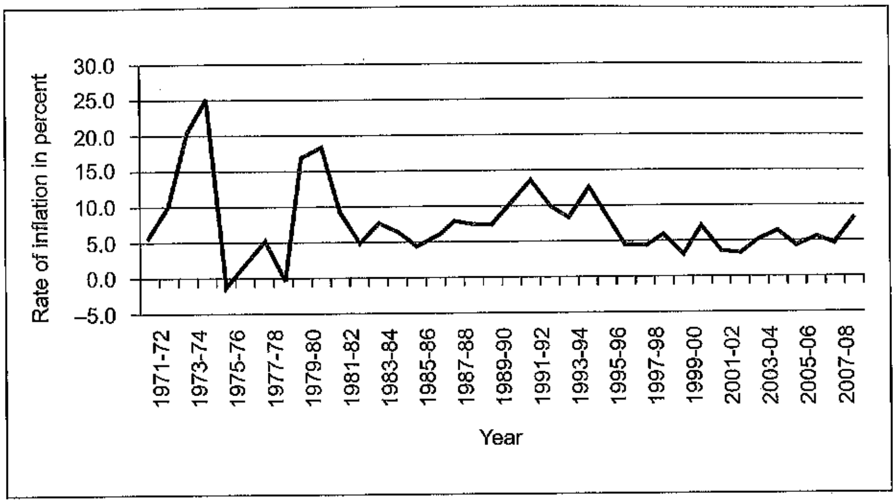


FIGURE 19A-7. Price Inflation, WPI, India, 1970-2009

Source: Same as in Figure 19A-2. Rate calculated from annual averages of wholesale price indices for all commodities.

Index (see the appendix to Chapter 20). As explained in the text, one of the ways of calculating the annual rate of inflation is to define it as:

$$((P_t - P_{t-1})/P_{t-1})*100$$

where P_t = 52-week average of the WPI in a particular year, and

P_{t-1} = 52-week average of the WPI in the previous year.

Figure 19A-7 shows the behavior of the annual rates of inflation between April 1970 and March 2009. The annual rate of inflation has fluctuated a lot but has stabilized to a great extent in recent years. The average rate in the last 10 years has been about 5% and that for the last 25 years about 7%.

TOOLS OF MACROECONOMIC POLICY

Both fiscal policy and monetary policy are actively used in India. We will discuss monetary policy in the appendix to Chapter 24. Fiscal policy has been used in India for demand management. In 2008-09, for example, with global economic downturn as the Indian economy experienced demand recession, the government announced fiscal measures—both tax cuts, for example in central excise duties and additional expenditure to stimulate the economy. But the government is expected in India not only to generate more demand to prevent underutilization of capacities already created. The more important role of the government in India has been to help the creation of capacities for economic growth either directly or indirectly by providing funds, incentives etc. to the other sectors. We have discussed the importance of the government and the role played by it elsewhere, particularly in the appendix to Chapter 16 and in the appendix to Chapter 26.

INTERNATIONAL LINKAGES

The Indian economy is going through the process of globalization at a rapid pace. Both the flow of goods and services and capital movements across borders have gone up significantly particularly in recent years (see the appendix to Chapter 27 and appendix to Chapter 28).

UNEMPLOYMENT AND POVERTY

In India too people lose jobs during downswings in business cycles. But the problem in India is that millions suffer from deprivation despite upswings. Most of the people have not benefited from economic growth in India and have remained extremely poor (see the appendix to Chapter 17 and appendix to Chapter 29). This is a major economic, social, and political problem in India. What is important is not only higher growth. It is also vitally important to change the priorities of economic policies to ensure that growth is more inclusive.

TABLE 19A-2. *Selected Economic Indicators, India, 1951-2008*

	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2007-08
Nominal GDP, Rs crores	9,719	16,512	42,981	132,520	515,032	1925,017	4320,892
Real GDP (1999-2000 prices), Rs crores	224,786	329,825	474,131	641,921	1,083,572	1,864,300	3,129,717
Index of agricultural production (1981-82=100)	46.2	68.8	85.9	102.1	148.4	165.7	207.1
Index of industrial production (1993-94=100)	7.9	15.6	28.1	43.1	91.6	162.6	268.0
Wholesale price index (1993-94=100)	6.8	7.9	14.3	36.8	73.7	155.7	215.8
Consumer price index (1982=100)	17.0	21.0	38.0	81.0	193.0	444.0	133
Exports, US$ million	1,269	1,346	2,031	8,486	18,143	44,560	162,904
Imports, US$ million	1,273	2,353	2,162	15,869	24,075	50,536	251,439

Source: *Economic Survey, 2008-09,* available at the website of the Ministry of Finance, Government of India, www.finmin.nic.in.