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ECONOMIC INDICATORS TO MEASURE INDIA'S GROWTH: A PERSPECTIVE

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ABSTRACT

Economic growth is important for any country and India's economic growth has stood at 8.7 percent in the financial year 2021-2022 with a growth of 19.5 percent in nominal GDP. However, the World Bank has cut down the growth rate, further to 7.5 percent from 8.3 percent for the financial year 2022-23 due to the whopping inflation in India and the supply chain disruption. The economic growth of a country depends on several indicators and it is important that all those indicators are favourable. India is currently facing the challenge of high inflation. The Reserve Bank of India has taken measures to curb the inflation rate by increasing the repo rate to 4.90 percent. However, the government has been taking several steps to control the surge in food and energy prices but the economy is expected to revive once the Russia-Ukraine war stops. This paper discusses the poverty rate, inflation rate, and literacy rate in terms of gross enrolment ratio to understand their impact on the economic growth of India.

Keywords	GDP, poverty rate, inflation rate, literacy rate, gross enrolment ratio, unemployment rate
JEL Classification	E24, I25, I32
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INTRODUCTION

The Economic Growth of a country depends on its socioeconomic conditions. India is one of the emerging economies and has been proliferating. As per the IMF report (World Economic Outlook 2021), India is the sixth largest economy in terms of nominal GDP in the world and stands as the 3rd largest by PPP in 2021. The World Bank projected India's growth at 8.3 % from 2021-22 till March 2022, whereas the Asian Development Bank forecasted India's GDP at 7.5 % from 2022-23 due to the country's rise in inflation. However, due to the food and oil prices surge, the World Bank has revised India's growth rate to 7.5 percent for the financial year 2022-23. Reserve Bank of India (RBI) projected the inflation rate at 5.7 % for 2022-23. The RBI has revised the repo rate to tackle inflation in the country. The repo rate has been revised twice and stands currently at 4.90. Further, the reduction in the inflation rate, poverty alleviation, and the increase in literacy rate, gross enrolment rate, and employment rate will improve the country's economic growth. This chapter analyses and discusses the different economic indicators directly or indirectly contributing to India's economic growth.

REVIEW OF LITERATURE

Ge, Yiqing, Tang, and Ke (2020) used indexes of 27 widely traded commodity futures to investigate the degree to which commodity prices may forecast the GDP growth rates of various countries. The paper examined that commodity returns may accurately predict the GDP growth for three months during the period taken for study, but the basis has just fair forecasting ability. (Ge & Tang, 2020). By calculating a comparable GPI, Pais, Daniel Francisco, et al. (2019) evaluated sustainable development for 28 nations that are members of the Organization for Economic Cooperation and Development (CGPI). Discussed are two alternative strategies for achieving both economic growth and sustainable development. The findings imply that the most prosperous nations are not always the most sustainable. In addition, unlike the lagged effect shown in the GPI, the impact of the financial crisis is instantly seen in the GDP (Pais et al., 2019). Nuraini, Ida, Hariyani, and Happy Febrin (2019), by looking at a number of social and economic indicators, including unemployment, income distribution across regions, income distribution among economic sectors, equity investment, and poverty, the authors sought to map the districts and cities in East Java that are categorized as having quality economic growth. They also attempted to develop a concept of quality economic growth. According to an analysis of Klassen's typology, most of East Java's districts and cities

(19 areas) fall into the advanced group but are depressed. In the meantime, ten regions can grow quickly, eight regions that are advanced and growing quickly, and one region, the Tuban District, is regarded as being very underdeveloped. (Nuraini & Hariyani, 2019). (Kitra & Lipkind, 2021), in their study 2021, demonstrated the empirical and predictive utility of the collective views of enterprises and families for extending cyclical macroeconomic data in Russia, particularly during the coronavirus shocks. The research design and methods were applied using qualitative data from surveys covering over 24 000 organizations and 5100 households across all of Russia. Information from 18 survey-based variables is included in the total economic sentiment indicator (TESI). The study methods include a vector autoregressive (VAR) model using dummy variables, Hodrick-Prescott filtering, and cross-correlation analysis. Results: For the years 1998 to 2020, the study demonstrates a nearly synchronous cyclic congruence between GDP growth and TESI dynamics. According to Mohammed Imleesh, Rabeea, et al. (2017), the main goal of this research is to examine Indonesia's macroeconomic indicators and economic growth using a panel data approach. They utilized Malaysia and Singapore as comparisons with other developing nations. Because inflation and interest rates are strongly tied to a country's macroeconomy and economic growth, they are also examined in this study concerning inflation and economic growth. Quantitative research was used in this study. The documentation with the secondary data approach has been used in this study to collect data from 1990 to 2015. Samia, Hamid Khalid, Jun Mahmood, Wen, and others (2021), in their study, use the System GMM estimate technique for a panel of 120 nations from 1997 to 2017 to examine the impact of financial development on key economic indicators, including economic growth, inflation, and employment. The usage of private sector credit, liquid liabilities, money and quasi-money, and bank credit are four different proxies for financial development. The findings show a detrimental impact of financial development on economic growth, which is in direct opposition to the conventional supply-lending argument. Additionally, it has been discovered that financial development is favorably related to inflation and employment expansion. It is suggested that the supervision of financial intermediaries needs to be strengthened and reformatted to ensure solid prudential lending practices (Wen et al., 2021).

RESEARCH GAP

Based on the reviewed paper, the authors of the present paper examined that there are adequate papers published, and statistical data on external, real, and monetary sectors of the various economy were considered in the papers reviewed. It is observed that indicators like the unemployment rate, inflation rate, poverty rate, and literacy rate significantly influence the country's GDP. However, it was felt that such data could be presented in a tabular form or in percentage analysis. Level data are not provided.

RESEARCH OBJECTIVES

The article's main objective is to understand the important economic indicators influencing the Gross domestic product in India and to tabulate and analyze the data collected from various sources. There were no hypotheses formulated as the data is secondary in nature.

To examine the various social and economic indicators such as poverty, unemployment, literacy, and gross enrolment rates (based on Consumer Price Index) influencing the Gross Domestic Product (GDP).

SCOPE OF RESEARCH

The scope is confined to 14 major states Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal.

PERIOD OF RESEARCH

The period of study is confined to 5 to 10 years, depending upon the data availability. Gross Domestic Product data taken is for ten years. Literacy rate data is based on the data published for the years 1981,1991, 2001, 2006, 2011, and 2018. State-wise Gross enrolment ratio is taken from 2015-2020. The state-wise average inflation rate was collected for the year 2014 to 2021. Poverty rate data is based on the data published by the Tendulkar committee for the years 2004-05, 2009-10, and 2011-12. The source of data is secondary in nature. Some of the sources are the RBI, World Bank Data 2021, Ministry of Education, Department of Higher Education Report 2020, and Census India 2011.

RESEARCH METHODS

The quantitative data used to analyze is based on a government survey. A simple tabular and graphical representation of data is presented.

RESULTS AND DISCUSSION

This section contains information compiled from various sources. India's economic growth is measured by analyzing some of the significant economic indicators, the data exhibited in the table given below:

The Gross domestic product in India and tabulate and analyze the data collected from various sources. There were no hypotheses formulated as the data is secondary.

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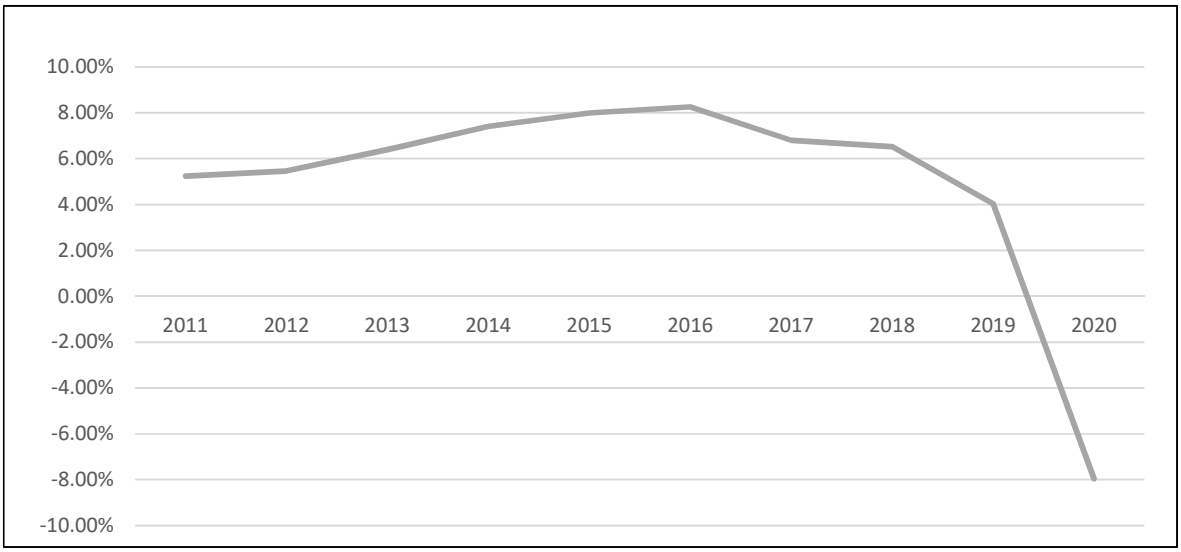
Table 1: India's Gross Domestic Product (annual growth in %) last ten years

Year	Growth	Year	Growth
2011	5.24%	2016	8.26%
2012	5.46%	2017	6.80%
2013	6.39%	2018	6.53%
2014	7.41%	2019	4.04%
2015	8.00%	2020	-7.96%

Source: World Bank Data 2021

Figure 1: GDP Annual Growth Rate of India

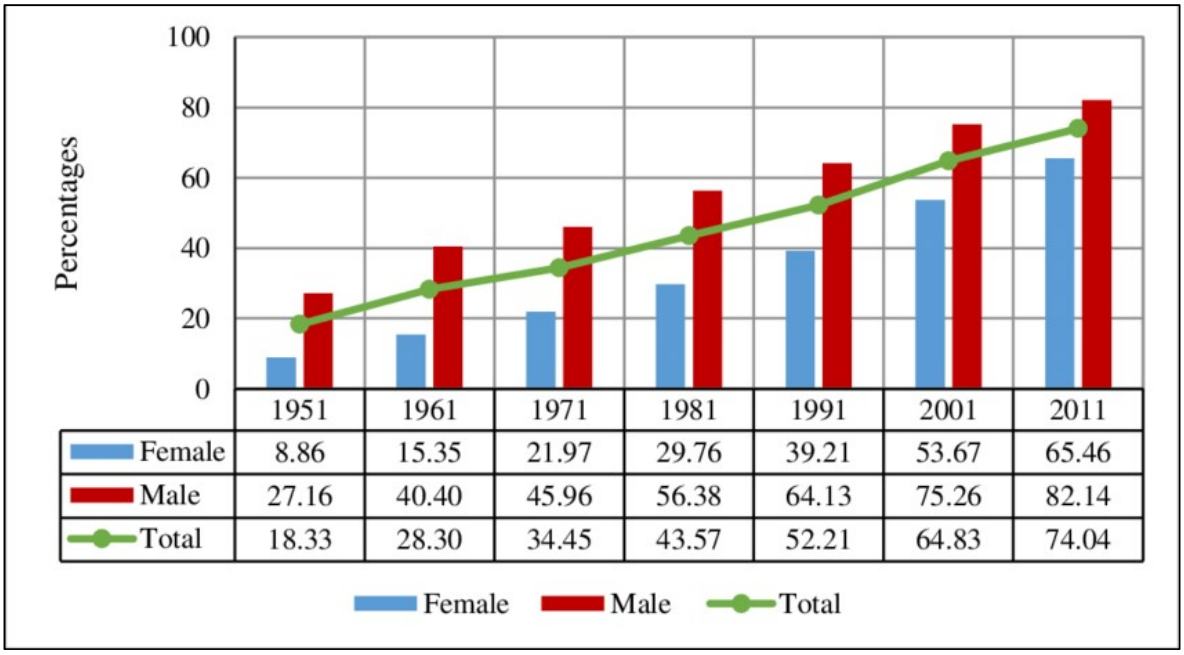


Source: Trading Economies

Figure 1 depicts India's Annual GDP growth rate for the last ten years. It can be seen that there has been a steady increase in the annual growth rate from 5.24 percent in the year 2011 to 9.36 percent in the year 2016. However, in 2017, it was 6.80 percent, a 2.80 percent decline from the previous year—further a 2.58 percent decline in the year 2019 from the year 2018. India's GDP growth rate for 2020 was -7.96 percent, which sharply declined by 12 percent from 2019.

Figure 2 helps us understand the literacy rates of India from 1951- 2011, which reveals that there has been an increase in literacy rates among both males and females in the country.

Figure 2: Literacy Rates of India, 1951 - 20211



Source: Census India 2011

Table 2: Total Literacy rate of the whole population of India from 1901 to 2011

Census Year	Percentage (in %)	Gap in Male- Female Literacy Rate (in %)
1901	5.4	9.2
1911	5.9	9.6
1921	7.2	10.40
1931	9.5	12.7
1941	16.1	17.6
1951	18.33	12.30

1961	28.3	25.05
1971	34.45	23.98
1981	43.57	26.62
1991	52.21	24.84
2001	64.83	21.59
2011	74.04	16.68

Source: Census India 2011

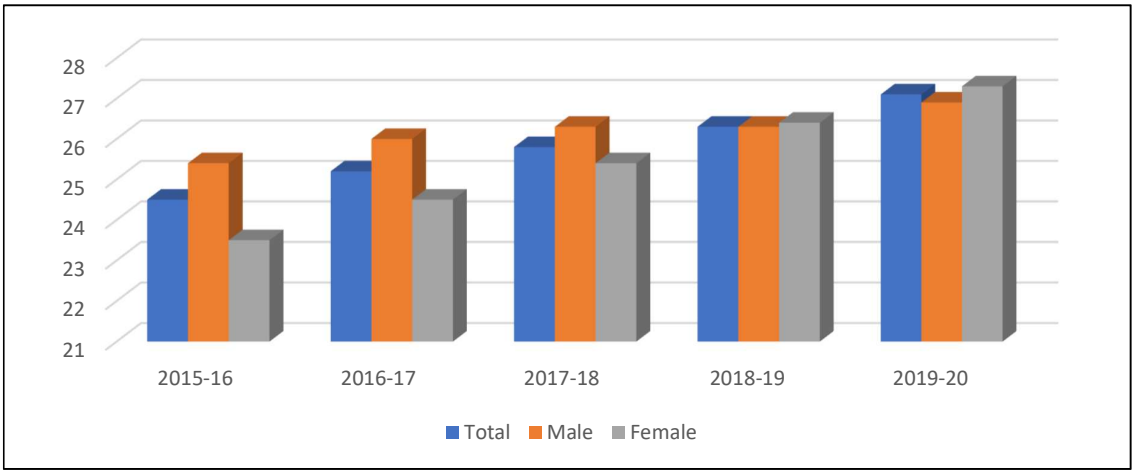
Table 3 shows the Gender-wise Gross Enrolment Ratio (GER) during the period 2015-2020 for both males and females in the country.

Table 3: Gross Enrolment ratio during the last 5 years

Year	Total	Male	Female
2015-16	24.5	25.4	23.5
2016-17	25.2	26	24.5
2017-18	25.8	26.3	25.4
2018-19	26.3	26.3	26.4
2019-20	27.1	26.9	27.3

Source: Ministry of Education, Department of Higher Education Report 2020

Figure 3: Gross Enrolment Ratio during the last 5 years



Source: Ministry of Education, Department of Higher Education Report 2020

Figure 3 represents the Gross Enrolment Ratio from 2015-16 to 2019-20. The figure shows India's male, female, and total gross enrolment ratio. The gross enrolment ratio shows an increase of 3.8 percent from 23.5 percent in 2015-16 to 27.3 percent in 2019-20. Both male and female gross enrolment ratio shows a steady increase from 25.4 percent (male) and 23.5 percent (female) in the year 2015-16 to 26.9 percent (male) and 27.3 percent (female) in 2019-20. Also, it can be noted that in the form year 2018-19 and 2019-20, the female gross enrolment ratio was slightly higher than the male gross enrolment ratio.

In the exhibit below is the Gross Enrolment Ratio of Major States

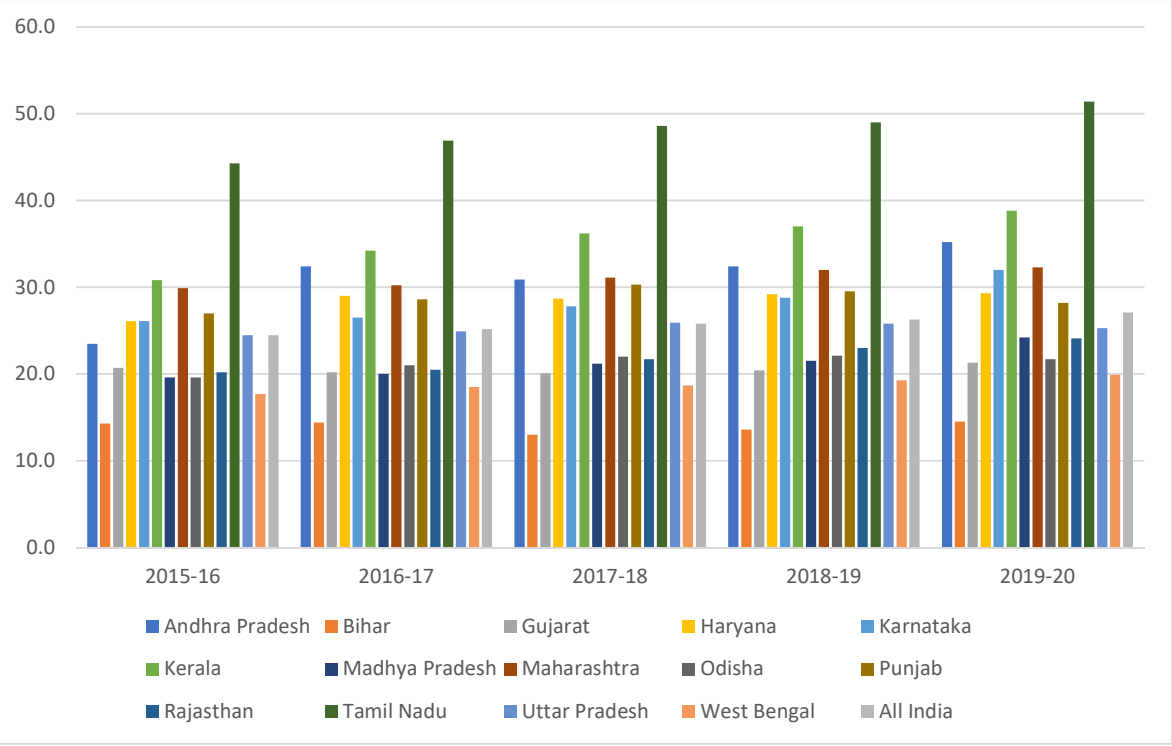
Table 4: State-Wise Gross Enrolment Ratio

State/Union Territory	2015-16	2016-17	2017-18	2018-19	2019-20
Andhra Pradesh	23.5	32.4	30.9	32.4	35.2
Bihar	14.3	14.4	13	13.6	14.5
Gujarat	20.7	20.2	20.1	20.4	21.3
Haryana	26.1	29	28.7	29.2	29.3
Karnataka	26.1	26.5	27.8	28.8	32.0
Kerala	30.8	34.2	36.2	37	38.8

Madhya Pradesh	19.6	20.0	21.2	21.5	24.2
Maharashtra	29.9	30.2	31.1	32	32.3
Odisha	19.6	21	22	22.1	21.7
Punjab	27	28.6	30.3	29.5	28.2
Rajasthan	20.2	20.5	21.7	23	24.1
Tamil Nadu	44.3	46.9	48.6	49	51.4
Uttar Pradesh	24.5	24.9	25.9	25.8	25.3
West Bengal	17.7	18.5	18.7	19.3	19.9
All India	24.5	25.2	25.8	26.3	27.1

Source: Author compilation

Figure 5: Gross Enrolment ratio of Major States



Source: Author Compilation

Figure 5 depicts the gross enrolment ratio of 14 major states from the year 2015-16 to 2019-20. Tamil Nadu has shown the highest enrolment among the major states throughout the years. There is an increase of 7.3 percent in the gross enrolment ratio of Tamil Nadu from 2015-16 to 2019-20, followed by Kerala with an 8 percent increase for the same duration. Bihar shows the lowest enrolment ratio throughout the duration at 14.3 and 14.5 percent.

Inflation (CPI): Inflation has been ever-increasing in the country. The following table reveals the state-wise average inflation (CPI) inflationary trend in fourteen major states in the country. The current inflation rate in India is above 6 percent, which is more than the modest inflation rate of 2-4%, due to global disruptions, especially the Russia- Ukraine war and sanctioning of the US.

Table 6: State-Wise Average Inflation (CPI) – General

State/Union Territory	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Andhra Pradesh	5.5	7.4	5.2	3.4	1.1	3.5	9.0
Bihar	6.7	4.5	3.9	2.7	3.9	2.2	7.3
Gujarat	5.5	4.9	5.1	2.6	2.5	3.7	5.9
Haryana	5.6	4.0	4.4	4.1	2.9	4.3	5.9
Karnataka	6.5	6.7	4.4	3.0	3.3	5.6	5.8
Kerala	7.3	4.2	4.3	6.0	4.9	6.1	6.0
Madhya Pradesh	5.5	4.4	3.5	2.7	3.5	5.5	7.6
Maharashtra	5.5	4.4	4.4	4.1	3.1	4.4	6.8
Odisha	6.8	6.4	4.9	2.2	2.6	4.6	7.9
Punjab	5.7	3.5	4.4	3.7	3.8	5.0	5.3
Rajasthan	6.6	5.7	5.4	3.2	2.3	5.3	4.4
Tamil Nadu	6.2	5.7	3.9	4.9	3.7	5.7	7.5
Uttar Pradesh	5.9	4.1	4.3	2.4	3.8	5.9	6.1

West Bengal	5.4	3.5	5.0	3.7	5.1	4.6	8.7
All India	5.9	4.9	4.5	3.6	3.4	4.8	6.2

Source: Author compilation

Table 6 depicts the CPI inflation rate of 14 major states of India from 2014-15 to 2020-21. From the table, it can be seen that in the year 2014-15, the inflation rate for all the major states was high, which declined slowly in the later years till 2018—2019. Among the major states, Andhra Pradesh shows the highest inflation rate in the year 2020-21, followed by West Bengal at 8.7 percent, Odisha at 7.9 percent, Madhya Pradesh at 7.6 percent, Bihar at 7.3 percent, and Rajasthan with the least inflation rate at 4.4 percent.

Unemployment: The unemployment rate as of May 2022 is 7.1%, 8.5% in Urban India, and 6.5% in rural India based on the 30 days moving average. The exhibit depicted below shows the state-wise unemployment rate in India for April 2022.

Table 7: Unemployment Rate in India –April 2022 (%)

States (India)	**Apr 2022**
Andhra Pradesh	5.3
Bihar	21.1
Gujarat	1.6
Haryana	34.5
Karnataka	2.7
Kerala	5.8
Madhya Pradesh	1.6
Maharashtra	3.1
Odisha	1.5
Punjab	7.2
Rajasthan	28.8

Tamil Nadu	3.2
Uttar Pradesh	2.9
West Bengal	6.2

Source: CMIE

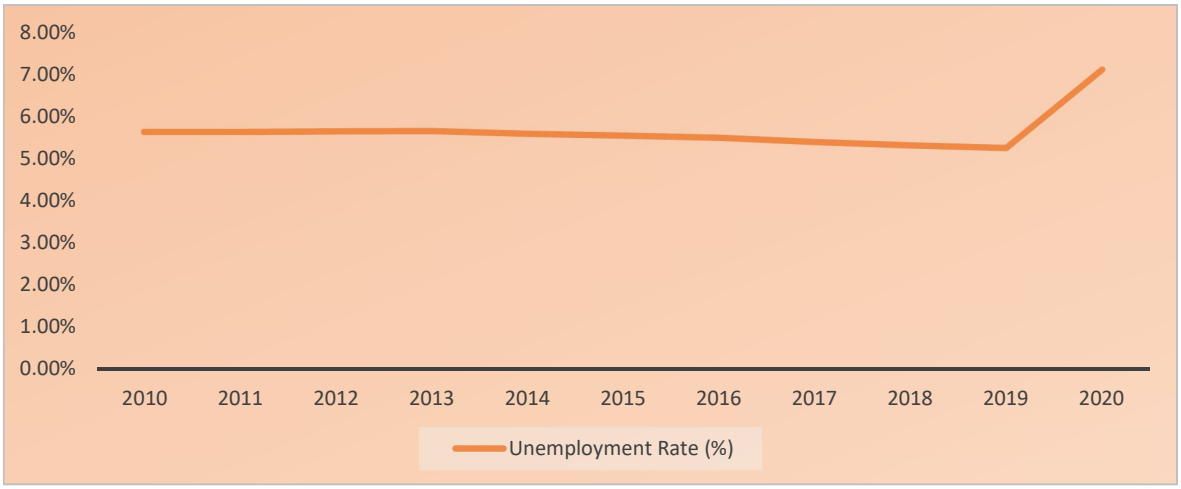
The unemployment rate in India for last 10 years is given in the Table 8:

Table 8: Unemployment Rate in India (%)

Year	Unemployment Rate (%)	Annual Change
2010	5.65%	0.04%
2011	5.65%	0.00%
2012	5.66%	0.01%
2013	5.67%	0.01%
2014	5.60%	-0.07%
2015	5.56%	-0.04%
2016	5.51%	-0.05%
2017	5.41%	-0.10%
2018	5.33%	-0.08%
2019	5.27%	-0.06%
2020	7.11%	1.84%

Source: World Bank Data 2021

Figure 8: Unemployment Rate in India (%)



Source: World Bank Data 2021

The unemployment rate in India is shown in Figure 8 from 2010 to 2020. The unemployment rate for nine years, i.e., the year 2010 to 2019, remained stable at 5.5 percent, whereas there is a spike in the rate from 5.27 percent in the year 2019 to 7.11 percent in the year 2020 due to the COVID-19 outbreak.

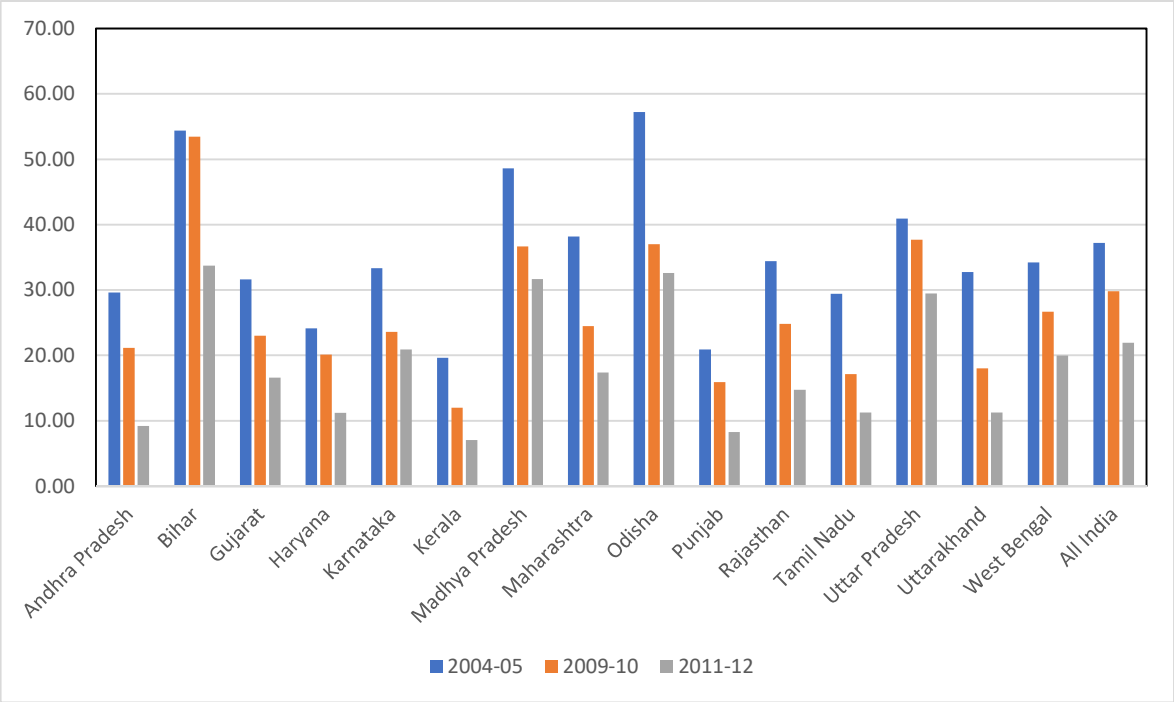
Poverty Rate in India: Periodic labor force survey report states that while income deprivation can increase the probability of descent into poverty, a multidimensional understanding is important to assess the degree of deprivation in terms of lack of basic necessities such as quality education and healthcare, which can improve living standards. In 2011, the poverty rate for India was 22.5 %. The poverty rate of India fell gradually from 63.1 % in 1977 to 22.5 % in 2011. The table provided below is the percentage of the population below the poverty line for the years 2004-05, 2009-10, and 2011-12.

Table 9: Number and Percentage Of Population Below Poverty Line (Based On MRP Consumption)

State/Union Territory	2004-05	2009-10	2011-12
Andhra Pradesh	29.60	21.10	9.20
Bihar	54.40	53.50	33.74
Gujarat	31.60	23.00	16.63
Haryana	24.10	20.10	11.16
Karnataka	33.30	23.60	20.91
Kerala	19.60	12.00	7.05
Madhya Pradesh	48.60	36.70	31.65
Maharashtra	38.20	24.50	17.35
Odisha	57.20	37.00	32.59
Punjab	20.90	15.90	8.26
Rajasthan	34.40	24.80	14.71
Tamil Nadu	29.40	17.10	11.28
Uttar Pradesh	40.90	37.70	29.43
West Bengal	34.20	26.70	19.98
All India	37.20	29.80	21.92

Source: Reserve Bank of India, 2021

Figure 9: Population Below Poverty Line (based on MRP Consumption)



Source: Reserve Bank of India, 2021

Figure 9 shows the poverty rate for three years, 2004-05, 2009-10, and 2011-2012 based on the Tendulkar method of Mixed reference period. From the figure, it can be seen that the poverty rate declined to 21.92 percent in 2011-12 from 37.20 percent in the 2004-05 year. The NITI Ayog has published the poverty rate from 2008-2019 based on the multidimensional poverty index of SDG, at 21.9 percent, whereas based on the PPP of $1.90 for the same duration, the poverty rate of India is estimated at 21.2 percent.

LIMITATIONS OF THE STUDY

The study is limited to secondary data analysis. Due to the unavailability of recent statistics, adequate information was not collected for years. Another limitation of the study is that industrial production, retail sales for the real sector; trade, exchange rates, and balance of payments for the external sector; and money supply, stock prices, and banking indicators for the monetary and financial sectors are not included in the study to measure GDP. As a result of which, data is not compiled for the same.

CONCLUSION

All the economic indicators discussed in the chapter help understand the country's socio-economic condition. Further, the annual growth in gross domestic product enables policymakers and central banks to comprehend whether the economy is contracting or expanding and take necessary action to maintain economic stability. It directs the government, organizations, and associations of companies. Businesses to encompass the impact of variables such as monetary and fiscal policy, economic downturns, expenditure, tax liability, and savings plans. It is important to understand that economic growth and development are equally important for a country. Hence, improvements in the annual growth rate of GDP lead to economic growth also, and the socio-economic condition of the economy helps in economic development. A lot of Government planning and implementation was executed through different schemes to generate employment, eradicate poverty and inequality, improve the gross enrolment ratio leading to an increase in literacy rate, health infrastructure development, and provide safe drinking water to remote areas. Policies like Atmanirbhar Bharat lead to self-reliance and a self-generating economy. The Asian Development bank's recent report (ADB outlook 2022) projected India to grow at 7.5 percent in the financial year 2023 and 8 percent in 2024 among the South Asian economies. The current inflation in India rose to 7.79 percent, as per NSO data published. The central bank has already implemented a contractionary monetary tool by revising the repo rate by 40 basis points. The economy is expecting a high threat of a further increase in inflation due to the war impact, and it is expected that the monetary policy committee, in June meet would take robust action to control the situation and maintain economic stability.

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