



"The Impact of the Pandemic on India's GDP and Inflation"

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Abstract

The severe challenges were faced by the economy since the beginning with cases of Covid-19 receding after 2 years of mayhem. Though it is early recovery phase it has the effect of pandemic slump.

Economy faces many problems like falling foreign exchange (forex) reserves of the country, depreciating value of Rupee against US dollar. GDP for FY22 is 8.7% & it is estimated that it will be 7% in FY23, which shows a fall of GDP value. GDP measures the monetary value of final goods and services—that is, those that are bought by the final user—produced in a country in a given period of time (say a quarter or a year).

The Impact of Inflation is it reduces the purchasing power of households due to an increase in prices. Inflation arises due to some reasons like change in repo rate, recently due to Russia –Ukraine war there is an increase in prices of oil & petroleum

It has caused significant job losses and income inequality in India

It has disrupted global supply chains, which has had a major impact on Indian businesses that rely on imported raw materials or intermediate goods. This has caused a significant slowdown in manufacturing activity and exports.

Key words : COVID, inflation GDP ,global supply chain

Introduction:

COVID had a negative impact on the economy there is a down fall of GDP ,inflation raised ,foreign exchange reserves decreased , break down of supply chain, unemployment etc

The major impact of COVID on these 2 economic factors or constraints:

1. GDP
2. INFLATION

GDP:

Gross domestic product (GDP) is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period. GDP used to estimate the size of an economy and its growth rate. GDP can be calculated in three ways, using expenditures, production, or incomes and it can be adjusted for inflation and population to provide deeper insights.

If country's real gross domestic product declines for two or more quarters, it is indicative of a recession in the business cycle. Negative growth rates are often accompanied by declining real income, increasing unemployment, and reduced production

Real GDP:

To determine “real” GDP, its nominal value must be adjusted to take into account price changes to allow us to see whether the value of output has gone up because more is being produced or simply because prices have increased. A statistical tool called the price deflator is used to adjust GDP from nominal to constant prices.

Nominal GDP

Nominal gross domestic product (GDP) is GDP given in current prices, without adjustment for inflation. Current price estimates of GDP are obtained by expressing values of all goods and services produced in the current reporting period.

There are three ways of measuring GDP, each of which should give the same answer. These methods are:

1. The Output Method (all value added by each producer),
2. The Income Method (all income generated) and
3. The Expenditure Method (all spending).

1. Income Approach:

The GDP income approach formula starts with the income earned from the production of goods and services. Under the income approach method, we calculate the income earned by all the factors of production in an economy.

Factors of production are the inputs that go into producing the final product or service. Thus, the factors of production for a business are – Land, Labour, Capital and Management within the domestic boundaries of a country.

Here’s the income method of GDP calculation:

$$\text{GDP} = \text{Total National Income} + \text{Sales Taxes} + \text{Depreciation} + \text{Net Foreign Factor Income}$$

Where,

1. **Total National Income:** The total of all wages, rents, interest, and profits
2. **Sales taxes:** Government taxes imposed on purchases of goods and services
3. **Depreciation:** Amount attributed to an asset based on its useful life
4. **Net Foreign Factor Income:** The difference between the total income that citizens and companies generate outside their country of origin and the total income generated by foreign citizens and companies within that country

The second approach, known as the expenditure approach, is the converse of Income approach as rather than Income, it begins with money spent on goods & services. This measures the total expenditure incurred by all entities on goods and services within the domestic boundaries of a country. So let’s learn how to calculate GDP using the expenditure approach.

Mathematically, GDP (as per expenditure method) = C + I + G + (EX-IM)

1. **C: Consumption Expenditure**, i.e. when consumers spend money to buy various goods and services. For example – food, gas bill, car etc.
2. **I: Investment Expenditure**, i.e. when businesses spend money as they invest in their business activities. For example, buying land, machinery etc.
3. **G: Government Expenditure**, i.e. when the government spends money on various development activities and
4. **(EX-IM): Exports minus Imports**, i.e. Net Exports. ie. We include the exports to other countries in the calculation of GDP and subtract the imports from other countries to our country.

3. Output (Production) Approach:

The GDP Output Method measures the monetary or market value of all the goods and services produced within the borders of the country.

In order to avoid a distorted measure of GDP due to price level changes, GDP at constant prices or Real GDP is computed. Using the Output Approach, GDP is calculated by this formula:

GDP (as per output method) = Real GDP (GDP at constant prices) – Taxes + Subsidies.

Inflation:

Inflation is the rate of increase in prices over a given period of time. Inflation is typically a broad measure, such as the overall increase in prices or the increase in the cost of living in a country.

Buyers will feel the pinch as it affects their personal finance, particularly spending and buying habits. Inflation occurs due to an imbalance between demand and supply of money, changes in production and distribution cost or increase in taxes on products. When economy experiences inflation, i.e. when the price level of goods and services rises, the value of currency reduces. This means now each unit of currency buys fewer goods and services.

What Drives Inflation

There are various factors that can drive prices or inflation in an economy. Typically, inflation results from an increase in production costs or an increase in demand for products and services.

It occurred, due to some reasons like Russia –Ukraine war, Repo rate (2022-23- 6.25%, 2021-22- 4%).

Cost-Push Inflation

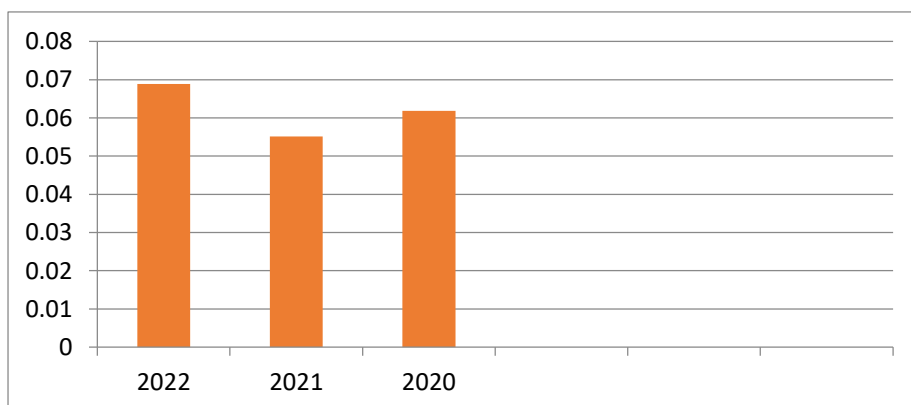
Cost-push inflation occurs when prices rise because production costs increase, such as raw materials and wages. The demand for goods is unchanged while the supply of goods declines due to the higher costs of production. As a result, the added costs of production are passed onto consumers in the form of higher prices for the finished goods.

Demand-Pull Inflation

Demand-pull inflation can be caused by strong consumer demand for a product or service. When there's a surge in demand for a wide breadth of goods across an economy, their prices tend to increase. While this is not often a concern for short-term imbalances of supply and demand, sustained demand can reverberate in the economy and raise costs for other goods; the result is demand-pull inflation.

2022	6.89%
2021	5.51%
2020	6.18%

THE ABOVE TABLE SHOWS THE INFLATION RATES



Significance of the study:

- It is essential to know the economy facing challenges due to **COVID** and how it overcomes it
- It is required to know the GDP of the country in recent years, which helps to compare the country's economy with other countries
- GDP is a measure to know the growth of the economy
- It is important to know about the inflation of the economy as it affects the consumer spending and behaviour

Scope of the study:

1. The impact of falling foreign exchange reserves and the depreciating value of the Indian rupee on the Indian economy.
2. The impact of the Covid-19 pandemic on the Indian economy, including its effect on GDP growth, inflation, job losses, and income inequality.
3. The reasons for inflation in India, such as changes in the repo rate and increases in the prices of oil and petroleum due to geopolitical factors.
4. The disruption of global supply chains and its impact on Indian businesses that rely on imported raw materials or intermediate goods.
5. The slowdown in manufacturing activity and exports in India due to the disruption of global supply chains.
6. The recovery phase of the Indian economy after the pandemic and the challenges it faces in achieving sustained growth.
7. The policy measures taken by the Indian government to address the economic challenges caused by the pandemic, such as fiscal and monetary stimulus, and their effectiveness.

Objectives of the study:

1. To analyze the impact of the Covid-19 pandemic on the Indian economy, including its effect on GDP growth, inflation, job losses, and income inequality.
2. To examine the reasons for inflation in India, such as changes in the repo rate and increases in the prices of oil and petroleum due to geopolitical factors.
3. To evaluate the policy measures taken by the Indian government to address the economic challenges caused by the pandemic, such as fiscal and monetary stimulus, and their effectiveness.
4. To analyze the prospects for sustained economic growth in the post-pandemic period and the challenges that the Indian economy faces in achieving this goal.

Sources of data:

There are various sources of data that can be used for research, analysis, or decision-making.

Primary data: primary data that is collected first hand through different methods such as surveys, interviews, observations, experiments, or fieldwork.

There is no primary data used in the study

Secondary data: secondary Data that is collected by others and is available in published form, such as books, journals, reports, databases, or websites.

As this study is relating to country's economy it totally depends on secondary data

Tools used for study:

For the study tables and a graph is plotted in order to know the inflation rates fluctuates due to some factors like

Review of literature

Understanding the relationship between inflation and real growth has all along been a key concern in macro-economic research. According to Rangarajan (1998), the question, in essence, presupposes a possible trade-off between price stability and growth either in the long or short run. The new endogenous growth theories, for instance, surmised that inflation has an adverse impact on growth because of its harmful effects on productivity and efficiency.

Others such as Choi, Smith and Boyd (1996) echoed a similar view and argued that inflation, in the presence of information asymmetry can harm growth by accentuating financial markets frictions and thereby adversely affecting the provision and allocation of investment. The rational expectations revolution inter alia, criticised the non-neutrality proposition of Keynesians by arguing that, under flexible markets, 8 repeated monetary shocks meant to facilitate growth could only lead to ever increasing levels of inflation in the long run [Rangarajan 1998].

Bruno and Easterly (1998) conclude that there was no evidence of a growth-inflation tradeoffs in a sample which excluded discrete high inflationary crisis. On the other hand, there was ample evidence to show that growth turned sharply negative when inflation crossed past a high threshold rate of 40 % per annum. They also argue that the failure of investigators in detecting a meaningful relationship between inflation and growth can be attributed to a stylised rapid recovery of output after inflation which, on an average, renders the overall statistical relationship insignificant.

A more recent work by Paul, Kearney and Chowdhury (1997) involving 70 countries (of which 48 are developing economies) for the period 1960-1989 found no causal relationship between inflation and economic growth in 40 % of the countries; they reported bidirectional causality in about 20 % of countries and a unidirectional (either inflation to growth or vice versa) relationship in the rest. More interestingly, the relationship was found to be positive in some cases, but negative in others. Recent cross-country studies, found that inflation affecting economic growth negatively, includes Fischer (1993), Barro (1996) and Bruno and Easterly (1998). Thus, Bruno and Easterly (1998) examined only cases of discrete high-inflation (40 % and above) crises and found a robust empirical result that growth falls sharply during high-inflation crises, then recovers rapidly and strongly after inflation falls. Cross-country evidence: Some recent studies have found cross-country evidence supporting the view that long -term growth is adversely affected by inflation (Kormendi and Meguire 1985; Fischer 1983, 1991, 1993; De Gregorio 1993; Gylfason 1991; Roubini and Sala-i-Martin 1992; Grier and Tullock 1989; Levine and Zervos 1992). Countries (especially in Latin America) that have experienced high inflation rates, have also witnessed lower long-term growth

Ghani (1991) estimates a price equation for India on a sample from 1967 to 1982. The equation shows a negative sign on output. Balakrishnan (1991) works on a sample from 1950 to 1980 in the Indian manufacturing sector. By regressing inflation on the output gap or the 'activity' variable, Balakrishnan finds a significantly negative relation, which clearly contradicts the Phillips curve for India. In another study on a sample from 1951 to 1990, Nachane and Laxmi (2002) find a negative relation between inflation and the output gap. Brahmananda and Nagaraj (2002) in their claims that the correlation between inflation and growth, if any, is often negative in Indian data from 1970 to 1999. Using the quarterly data from 1983Q1 to 2001Q4 on output series constructed by Virmani and Kapoor (2002) and Virmani (2004) finds a negative relation between the output gap and inflation.

Papers in a Lucas-supply-function framework attempt to see the output gap in response to inflation in India. Following Lucas (1973), Arak (1977) and Makin (1982) one study by Samanta (1986) finds a negative relation between the price level and real output in India. Samanta (1986) attempts to estimate an expectations adjusted supply function (EASF) for India using yearly data from 1952 to 1983. The EASF hypothesis states that price change affects real output or supply only when such price change is purely unanticipated Lucas (1973), Samanta's estimation, which does not justify the EASF for India finds a significantly negative relationship between price surprises and output.

Many papers have estimated directly the impact of inflation on growth, output, investment and productivity. In this literature, the growth rate of the economy is considered as the dependent variable and the inflation rate as the explanatory variable. The empirical results have a clear policy implication: if inflation affects growth negatively, then monetary policy ought to stress price stability based on vigorous anti-inflationary policies targeting zero inflation.5 Examples of papers that have attempted to follow this line of research are Smyth (1992, 1994, and 1995), De Gregorio (1993), and Barro (1995). Smyth (1992) has estimated a negative relationship between inflation and growth: for each one percentage point increase in the USA inflation the annual growth rate is reduced by 0.223%. Smyth (1994) has also shown that inflation acceleration impacts growth negatively in the USA, each one percentage point increase in acceleration causing a reduction of 0.158% in growth. For Germany, Smyth (1995) has estimated that a 10% increase in the rate of inflation reduces the rate of growth of total factor productivity by 0.025%. Cameron et al. (1996) test the

robustness of this kind of estimation and their results are suggestive that there is no connection between inflation and the level of productivity

Suggestions:

- ❖ New reforms have to be laid down to improve Exports
 - ❖ Holding FDI'S
 - ❖ Reducing taxes on pharmaceutical products
18% GST is charged on medicines.
 - ❖ E-retailing
 - ❖ Higher taxes on luxurious goods
 - ❖ Investment in renewable energy like investment in biogas production , roof top solar system for households
 - ❖ Investment in warehouse and supply chain
 - ❖ Investment in transportation and infrastructure
 - ❖ Investment in pension and insurance schemes
 - ❖ Funding small scale and start-up companies
- Apart from these a common man can have a small portion to increase GDP by purchasing goods and services from domestic market. Normally government go through monetary policy which is a common method of managing inflation.
- Still, India is a "bright spot" in the world economy but needs to boost its strengths.

Conclusion

Overall, the Indian economy faces significant challenges due to the pandemic and its impact on various sectors. While policy measures have been taken to mitigate the impact, sustained economic growth will require addressing these challenges through a combination of short-term and long-term measures.

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