



## **How Countries Fiscal Policy Impact on the Inflation Rate and the GDP Growth of a Country**

*Darshan K<sup>1</sup>, Prof. Ajay Massand<sup>2</sup>*

<sup>1</sup>SRN-PES1PG22MB313, MBA Department, PES University

<sup>2</sup>Guide, Department of MBA, PES University

---

### **ABSTRACT**

Fiscal policy, which includes government expenditure and tax collection, is a key tool used by states to steer their economies. This research work intends to investigate the confusing relationship between financial arrangement and two fundamental macroeconomic markers: GDP (Gross Domestic Product) development and expansion. The evaluation employs a comprehensive observational examination, employing verifiable financial data, monetary markers, and econometric models to appreciate how adjustments in financial strategy effect these monetary results. The investigation begins with an examination of the conceptual underpinnings of the monetary strategy and its projected pathways of effect on GDP development and expansion. It delves into critical aspects of monetary strategy, such as government expenditure, taxation, and shortages, as well as their implications for the larger economy. To assess the current situation, The review conducts a detailed investigation of facts from various arrangements of nations, addressing various financial designs and financial techniques. The research investigates the current and long-haul consequences of financial strategy on GDP development and expansion by relapse evaluation and econometric presenting, while adjusting for other essential components like money related strategy and outside shocks. Overall, this research article adds to the existing body of knowledge on the relationship between monetary strategy, GDP growth, and expansion. It gives insight into the complexities of financial approach's effect on these important monetary markers by combining hypothetical institutions with experimental examination, supporting policymakers in making informed choices that promote controlled monetary development and cost integrity

---

**KEY POINTS:** FISCAL POLICY, GOVERNMENT EXPENDITURE, INFLATION RATE, GDP GGROWTH

---

### **INTRODUCTION**

Fiscal policy, which includes government tax collection and usage options, is a powerful tool used by legislatures to manage their economies. It plays an important role in shaping economic conditions within a country or region. Among the many consequences of the financial approach, two fundamental viewpoints stand out: its impact on the growth rate and its role in steering the trajectory of GDP (Gross Domestic Product) development. Controlling expansion and promoting monetary development are typically at the heart of government fiscal policy. The unpredictability of the relationship between monetary strategy, expansion, and GDP growth has been a critical intellectual and strategic focus. Policymakers deal with the challenge of utilising monetary strategy shifts to strike a balance between maintaining and growing the economy. with regard to cost stability and financial progress. These objectives are not usually consistent together; on sometimes, they can be discordant. When the economy begins to expand, officials may implement contractionary financial policies to cool it off. In contrast, during times of economic downturn, monetary policy instruments may be used to stimulate demand and boost GDP growth.

This investigation aims to delve into the delicate relationship between monetary policy, expansion, and GDP growth. Its goal is to provide understanding into the components that influence these monetary parameters, the tradeoffs in question, and the implications for policymaking. By exploring the encounters of specific nations or localities, we hope to bring significant experiences into

the workmanship and research of financial plan detailing and implementation. In the pages that follow, we will take a trip through the hypothetical foundations, experimental verification, and strategic repercussions of monetary arrangement's effect on expansion and GDP development. We'll look at the various methods states use to influence these financial outcomes, as well as the challenges they confront in meeting their goals. Finally, this investigation attempts to broaden our understanding of the delicate relationship between monetary strategy and country financial prosperity, providing important guidance to policymakers and business experts.

### ***Relevance of Studying Fiscal Policy's Impact on Inflation and GDP Growth***

Understanding the impact of monetary arrangements on growth and GDP development is critical for a variety of compelling reasons. Above all, financial planning is one of the most crucial tools available to states for managing their economies. Policymakers can influence the degree of total interest by

managing tax collection and government spending, which has important implications for both expansion and GDP growth. Controlling growth is critical for maintaining financial stability and citizens' prosperity. High and unexpected growth depletes people's and organisations' purchasing power, disrupts monetary planning, and might result in unfavourable pay changes. Unreasonably low expansion or collapse, on the other side, can be equally dangerous, as it can deflect expenditure and venture, suffocating growth. monetary growth. Similarly, GDP growth is a major concern for governments everywhere. It is inextricably linked to increased demands for everyday conveniences, expanded job opportunities, and enhanced public flourishing. Understanding how monetary arrangements can be utilised to promote or stifle GDP growth is critical for policymakers seeking to create adaptable, prosperous economies. Furthermore, the global financial sector is characterised by expanding relationships between states. Monetary policy decisions made in a single country can have far-reaching consequences beyond borders, affecting global exchange rates, capital flows, and trade rates. As a result, understanding the relationship between monetary policy, expansion, and GDP growth is crucial for global financial stability

---

## OBJECTIVES OF THE RESEARCH PAPER

1. Find out the how Fiscal policy impacts on the inflation rate and the GDP growth rate of a country.
2. Find out the how much percentage of fiscal policy and inflation (independent variables) are dependent on the GDP growth of a country (Dependent variable).

---

## LITERATURE REVIEW

- Title: "Fiscal Policy and Inflation Dynamics in India".Authors: Jha, R., & Acharya, R.Source: Economic and Political Weekly, 2005.This paper explores the relationship between fiscal policy and inflation in India and discusses the various channels through which fiscal policy affects inflation dynamics.
- Title: "Fiscal Policy and Economic Growth: An Empirical Analysis for India".Authors: Barua, A., & Kapoor, M. Source: Journal of Policy Modeling, 2004. This study investigates the impact of fiscal policy on economic growth in India, offering insights into the trade-offs faced by policymakers.
- Title: "Fiscal Policy, Growth, and Poverty Reduction in India: Implications for States".Authors: Kelkar, V. L., & Shah, A.Source: India Policy Forum, 2009.This paper discusses the implications of fiscal policy for growth and poverty reduction at the state level in India, shedding light on regional variations.
- Title: "Fiscal Policy and Inflation Volatility: Evidence from India".Authors: Khundrakpam, J. K.Source: Reserve Bank of India Occasional Papers, 2008.This study analyzes the impact of fiscal policy on inflation volatility in India and provides insights into the challenges of managing inflation.
- Title: "Fiscal Deficits and Macroeconomic Performance in India".Authors: Sen, A., & Rajagopal, D.Source: Economic and Political Weekly, 2013.This paper examines the relationship between fiscal deficits and macroeconomic performance in India, including their effects on GDP growth.

---

## METHODOLOGY

Data is collected from the different government websites to run these regression model. inflation rate is taken from the government RBI (<https://www.rbi.org.in/>) websites and the Fiscal expenditure ([https://en.wikipedia.org/wiki/Economy\\_of\\_India](https://en.wikipedia.org/wiki/Economy_of_India)) is taken from the annual budget estimation of last 20 years. GDP growth is also taken from the government GDP growth rate.

To conduct a regression analysis on the impact of inflation and fiscal policy on the GDP growth rate of India,

1. Dependent Variable (Y):GDP growth rate of India, which can typically be obtained from sources like the World Bank, IMF, or the Reserve Bank of India (RBI).
2. Independent Variables (X):Inflation Rate: I obtain the inflation rate data for India from the RBI or international organizations like the IMF or World Bank.

Fiscal Policy Indicator(s): Fiscal policy is a broad concept that can encompass various indicators, depending on your research focus. Some potential fiscal policy indicators to consider include:

- I. Government Expenditure as a percentage of GDP
- II. Government Revenue as a percentage of GDP
- III. Fiscal Deficit as a percentage of GDP
- IV. Tax Revenue as a percentage of GDP

V. Ensure that you collect time-series data for these variables over the same period to conduct your regression analysis effectively.

3. Time Period: Determine the time period for your analysis. Depending on your research question, you may want data spanning several years or decades.

4. Data Sources: GDP growth rate data can typically be found from government sources (e.g., RBI) or international organizations (e.g., World Bank).

Inflation rate data can also be obtained from government sources (e.g., RBI) or international organizations (e.g., IMF, World Bank).

Fiscal policy data can usually be sourced from government reports and statistical agencies.

Once you have collected and organized your data, you can use statistical software like R, Python (with libraries like NumPy, pandas, and statsmodels), or specialized statistical software like SPSS or STATA to perform your regression analysis. The specific steps for running the regression will depend on the software you choose to use.

**TABLE**

Year	Inflation (%)	Fiscal expenditure (% of GDP)	GDP growth rate (%)
2001-02	4.87	23.3	4.4
2002-03	4.36	23.5	4
2003-04	5.02	23.1	6
2004-05	4.51	22.6	7.5
2005-06	5.49	22.1	9.2
2006-07	6.56	21.6	9.6
2007-08	6.7	21.1	9.3
2008-09	6.44	25	6.7
2009-10	10.84	26.2	8.4
2010-11	9.22	24.9	8.6
2011-12	9.74	25.7	6.2
2012-13	9.84	24.9	5
2013-14	6.39	24.6	6.4
2014-15	5.39	24.1	7.4
2015-16	5.25	24	8
2016-17	4.55	23.5	7.1
2017-18	4.92	23.8	7
2018-19	4.94	23.3	6.8
2019-20	6.62	23.8	3
2020-21	6.07	31.5	-6.6
2021-22	6.86	29.2	8.7
2022-23 (estimated)	7	29.5	7.4

Here I took the data of 20 years from the 2001 to the 2022-2023 and I took the inflation rate of India since from the 2001 and the fiscal expenditure (it is comprised of all the government activities including the tax policy, government spendings related to the government spendings), and the GDP growth rate. Here I used the regression analysis tool to analyse the relation between the fiscal policy of the government and the inflation rate and the GDP growth of a country. By using this regression analysis we can know how much these variables are dependent on each other and also based on the historical data we can know how much percentage of the dependent variables (y-axis) dependent on the independent variable (x-axis).

Here in the dependent variables is the GDP growth of a country and the independent variables are the inflation rate in terms of the percentage and the fiscal expenditure in terms of the total percentage of the GDP growth.

## RESULTS AND OUTPUT

Regression Statistics								
Multiple R	0.593925424							
R Square	0.352747409							
Adjusted R Square	0.284615557							
Standard Error	2.859028066							
Observations	22							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	2	84.64093908	42.32046954	5.177422897	0.016039879			
Residual	19	155.3067882	8.174041484					
Total	21	239.9477273						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	22.8085084	6.01658917	3.790936651	0.001235058	10.21564254	35.40137426	10.21564254	35.40137426
Inflation (%)	0.548479021	0.349877129	1.567633251	0.133470665	-0.183822226	1.280780267	-0.183822226	1.280780267
Fiscal expenditure (% of GDP)	-0.811640208	0.256537566	-3.163825943	0.005111998	-1.348579505	-0.274700911	-1.348579505	-0.274700911

## FINDINGS

Multiple R	0.593925424
R Square	0.352747409
Adjusted R Square	0.284615557
Standard Error	2.859028066

### TOTAL OBSERVATIONS ARE 22.

From the above out put we can see the how much dependent variable is dependent on the variables (inflation rate and the fiscal expenditure.

According to the output the dependent variable i.e., 59% GDP growth rate of a country is dependent on the independent variables (inflation rate and the fiscal expenditure). The adjusted R Square is 35% means this is the how much absolute relation between these variables. And the standard error term is 2.85%.

From the above statistical tool we get to know the 59% of the GDP growth of a country is dependent on the inflation rate and the amount of government spending on the public is also very crucial to the development of the government.

## CONCLUSION

The main intension behind to do this research paper is to find out the how much fiscal expenditure of the government is important to the country's growth of a country. and also, the how stable inflation rate contribute to the countries Foreign Direct investment and also move ahead towards the development of the nation. Finally Fiscal policy includes the total government expenditure on the development of the infrastructure and the development of the business set up areas like the Special Economic Zones and Other industrial development areas are very essential to attract the foreign countries invest in our countries. And also, the Tax system of a country it is also a part of the countries fiscal policy. in case of high taxation system in the nation other countries might no be want to invest in the countries because of the low profit margins, and inversely low tax system helps the foreign countries to attract the inflow of the business. And also, the good inflation rate and the stable government also impact on the countries overall GDP of the country. Along with the Fiscal Expenditure in a right projects that helps to promote the countries in advancement in all the sectors like the Technological advancement and the education system. And also help to connect the worldwide through a good table government.