

FISCAL DEFICIT AND GDP IN REFERENCE TO RICARDIAN THEORY: AN EVIDENCE FROM INDIA

Krati Agarwal¹ (Research Scholar), Prof. V.K.Gangal

Dayalbagh Educational Institute,
Dayalbagh, Agra-282005.

Email: kratiagarwal2003@gmail.com

ABSTRACT

The relationship between fiscal deficit and economic process is altogether one amongst one in every of one among the highly debated issues in all world economies. As per theoretical aspect there are three different views during this regard. Fiscal deficit is explained because the more than the sum of revenue expenditure, capital outlay and net lending over revenue receipts and non-debt capital receipts which also includes the proceeds from disinvestment. The govt. has got to incur deficits so on finance its revenue and expenditure don't match and also to finance investments. GDP is that the defined market price of all final goods and services produced during a year. The GDP includes both government spending and personal consumption of products and services. Ricardian specifies that an individual's consumption is calculated by the lifetime present value of his after-tax income. Therefore, the Ricardian equivalence says a government cannot stimulate consumer spending since people assume that whatever is gained now are going to be offset by higher taxes due within the future. The objectives of the study were to understand the connection between fiscal deficit and GDP of India and to prove Ricardian theory in reference to fiscal deficit and GDP. Multivariate analysis has been used to find the relationship. The finding of the paper indicates that there's positive and insignificant relationship between fiscal deficit and economic process. This study shows that fiscal deficit doesn't affect GDP and doesn't have adverse effect on GDP.

Keywords: *Fiscal deficit, GDP, Ricardian theory, India, Indian economy.*

INTRODUCTION

A government budget is claimed to be a budget that present the government's proposed revenues and spending for a fiscal year. The govt. budget balance, also referred as

- General government balance
- Public budget balance
- Public fiscal balance

Fiscal deficit = government revenues – spending

- Government budget surplus is named as positive balance,
- Government deficit is named as negative balance.

In other and straightforward words, a fiscal deficit occurs when a government's total expenditures exceed the revenue that it generates, excluding money from borrowings. Deficit is that the accumulation of yearly deficits which differs from debt.

Fiscal deficit is explained because the more than the sum of revenue expenditure, capital outlay and net lending over revenue receipts and non-debt capital receipts which also includes the proceeds from disinvestment. The govt. has got to incur deficits so on finance its revenue and expenditure don't match and also to finance investments.

A fiscal deficit may be a shortfall during a government's income compared with its spending. The govt. that features a fiscal deficit is spending beyond its means.

A fiscal deficit is different from fiscal debt. The latter is that the total debt accumulated over years of compensatory spending .A fiscal deficit is calculated as a percentage of gross domestic product (GDP), or just as total dollars spent in more than income. In either case, the income figure includes only taxes and other revenues and excludes money borrowed to form up the shortfall.

REASON OF FISCAL DEFICIT

1. Payment of interest: the main component of state expenditure is that the payment of interest loans. The govt. debt has considerably increased over the years. This resulted within the increase of interest burden on the govt.
2. Poor performance of public sector: Political interference, inefficiency and corruption of management, Lack of professionalism Surplus staff.
3. Excessive government borrowings: the interior and external debt of the govt. has considerably increased during past few decades. Thanks to an equivalent the govt. has got to incur high expenditure in sort of payments of interest.
4. Tax evasion: Indian legal system is formed from complex procedures with exemptions which can cause evasion.
5. Increase in subsidies: the main subsidies provided by the Central Government of India have increased over the years leading to fiscal imbalance.
6. Defense expenditure: the govt. features a limited scope to scale back defense budget thanks to security problems across the Indian borders.

A government deficit occurs when government spending outpaces revenue. Deficits also are caused from a decline in revenue thanks to an economic contraction like a recession or depression. Unplanned events, like natural disasters and war, also can cause deficits.

GDP

GDP is the defined market value of all final goods and services produced in a country in a year. The GDP includes both government spending and private consumption of goods and services.

GDP can be measured by totaling money spent on four categories:

- Consumption (C)
- Investment (I)
- Government Spending (G)
- Net Exports [Exports (X) - imports (M)]

$$\text{GDP} = C + I + G + (X - M)$$

1. Consumer: The spending by households on goods and services like car, food, clothes, college tuition, sporting event, health insurance.
2. Investment: Spending by businesses on capital machinery, factories, equipment, tools, computers, new buildings, inventory
3. Government: Spending done by all levels of government on goods and services like Military, education, roads, healthcare.
4. Net Exports: Spending by people outside the United States on US produced goods and services (exports, or X) minus spending by people in the United States on foreign goods and service (imports, or M)

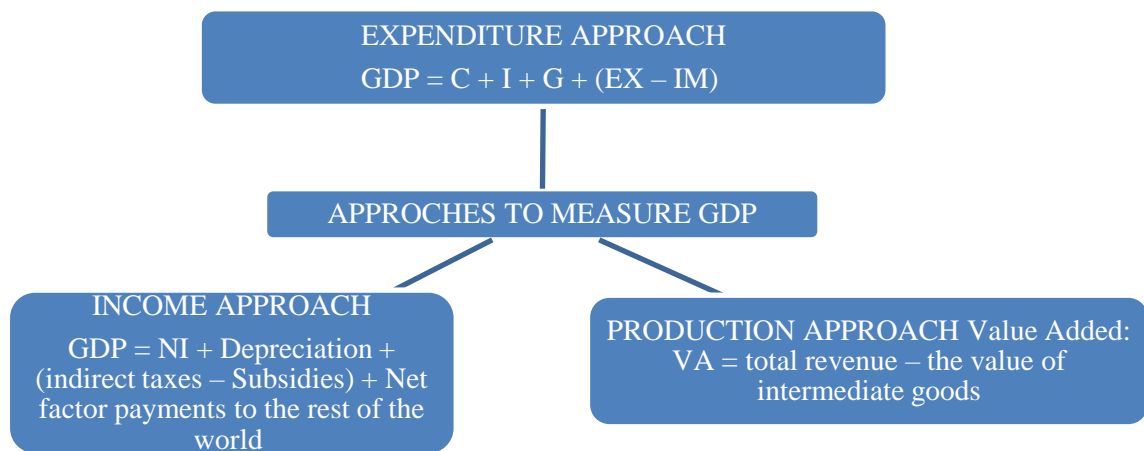
Gross Domestic Product (GDP) is that the price of all finished goods and services made within a rustic during a selected period. GDP provides an economic snapshot of a rustic, wont to estimate the dimensions of an economy and rate of growth.

GDP are often calculated in 3 ways, using expenditures, production, or incomes.

It are often adjusted for inflation and population to supply deeper insights.

- Though its limitations, GDP may be a key tool to guide policymakers, investors, and businesses in strategic deciding.

APPROCHES TO MEASURE GDP



Source: Wikipedia.com

RICARDIAN THEORY

Ricardian theory was developed by Ricardo within the 19th century. Ricardian equivalence is claimed to be a theory that suggests that when a government tries to stimulate an economy by increasing debt-financed government spending and demand remains unchanged. This is often thanks to the very fact that the general public saves its excess money to buy expected future tax increases which will be used to pay off the debt. Ricardian equivalence is also called the Barro-Ricardo equivalence proposition, which specifies that an individual's consumption is decided by the lifetime present value of his after-tax income. Therefore, the Ricardian equivalence says a government cannot stimulate consumer spending since people assume that whatever is gained now will be offset by higher taxes due in the future.

FISCAL DEFICIT AND GDP

The relationship between fiscal deficit and economic growth is one of the highly debated issues in all world economies. As per theoretical aspect there are three different views during this regard.

Neo-classical theory: Fiscal deficit will adversely affect growth

Keynesian economists: Fiscal compensatory spending is required so as to use the prevailing unutilised services.

Ricardian: there's no such relationship between deficit and growth.

The economic process of developing countries in recent times has mentioned the problems of fiscal deficit as a main focus.

The Responsibility and Budget Management Act (FRBM), shows a significant danger to macroeconomic stability in India. It's been argued that higher deficits would adversely affect the macro economy and hence should be kept in check.

REVIEW OF LITERATURE

- Mohammed Ershad Hussain and Mahfuzul Haque has examined the relationships between three parameters that are government spending, economic growth and long-term interest rate for Bangladesh. Data was collected from two sources, the Bangladesh Bureau of Statistics, and World Banks's World Development Indicators and as a result this study shows a positive relation between fiscal deficit and growth.
- Anantha Ramu M R & K. Gayithri worked on Fiscal Deficit Composition and Economic Growth Relation in India: A Time Series Econometric Analysis, in Institute for Social & Economic Change (ISEC), Bangalore, 2016 with certain objective as to know how fiscal deficit is affecting GDP. It study was based on analytical approach. A an outcome this paper showed that fiscal deficit is adversely affecting growth and also argued that if fiscal deficit money is spent on capital formation
- Najid Ahmad researched with objectives as to investigate the relationship between budget deficit and economic growth of Pakistan for which time series data has been used and the results show that FDI has significant and positive relation with the gross domestic product of Pakistan.
- Goher Fatima, Ather Maqsood Ahmed, and Wali Ur Rehman studied with objectives as to investigate the impact of fiscal deficit on the investment and GDP growth of Pakistan. Study was based on secondary data that was collected from Pakistan Economic Surveys and State Bank of Pakistan's annual reports. The study concluded that Fiscal deficit affects economic growth of country very adversely and in case of Pakistan, country is facing the adverse situation of fiscal deficit since last many decades.
- Lance Taylor, Christian R. Proano, Laura de Carvalho and Nelson Barbosa studied Fiscal Deficits, Economic Growth, and Government Debt in the USA with certain objectives as to know the relationship between fiscal deficit, economic growth and government debt for which unit roots test has been applied. The study showed that the GDP growth bring changes in the real effective interest rate.
- Le Thanh Tung (2018) examined the effect of fiscal deficit on economic growth in Vietnam, but its government has been facing large fiscal deficits for many years by now. The results strongly directs that there is a co-integration relationship between fiscal deficit and economic growth, in which fiscal deficit destructive effects on economic growth in both had long and short run. The correlation analysis has showed that fiscal deficit can hamper not only the gross output but also private investments, foreign direct investments, and further the net exports. Our results provide evidence for policymakers for the country and other emerging countries.

RESEARCH GAP

Fiscal deficit and GDP are the major concern for our country's economy as Ricardian theory says there is no relationship between them. So, it becomes important to study the same.

Researcher found that all the studies show a relationship between Fiscal deficit and GDP but researcher fails to find any study that shows relationship between Fiscal deficit and GDP in respect of Ricardian theory. Here, researcher is trying to find relationship between Fiscal deficit and GDP in relation to Ricardian theory.

NEED OF THE STUDY

Fiscal deficit shows the Government proposed revenues and the spending for respective financial year. Fiscal deficit is calculated as the difference between the Government revenues and spending. GDP shows the growth of the economy. Fiscal deficit and economic growth majorly considered issues in the world economies.

As, Ricardian theory says that fiscal deficit and GDP has no relation as when Government increases spending people save more and off set future tax dues.

So, researcher aims to study relationship between Fiscal deficit and GDP as they are of serious concern and it is important to understand the consequences of rising fiscal deficit on the economic growth of Indian economy.

OBJECTIVES

- To know the relationship between fiscal deficit and GDP of India.
- To analyse Ricardian theory in relation to fiscal deficit and GDP.

HYPOTHESES

H_0 = There is no significant relationship between fiscal deficit and GDP of India.

RESEARCH METHODOLOGY

SCOPE: Study is conducted for the period of 18 years (2000-01 to 2017-18)

SOURCE OF DATA: The study is based on secondary data collected from handbook of RBI.

TOOLS USED: Regression analysis has been used to find the relationship between fiscal deficit and GDP.

ANALYSIS AND INTERPRETATION

H₀= There is no significant relationship between fiscal deficit and GDP of India.

YEAR	FISCAL DEFICIT (in million)	FISCAL DEFICIT (Log Values)	GDP (index)	GDP (Log Values)
2000-01	1188.16	3.07	4.82	0.68
2001-02	1409.55	3.15	3.8	0.58
2002-3	1450.72	3.16	7.86	0.89
2003-04	1232.73	3.09	7.92	0.89
2004-05	1257.94	3.1	9.28	0.97
2005-06	1464.35	3.17	9.26	0.97
2006-07	1425.73	3.15	9.8	0.99
2007-08	1269.12	3.11	3.89	0.59
2008-09	3369.92	3.53	8.48	0.93
2009-10	4184.82	3.62	10.26	1.01
2010-11	3735.91	3.57	6.64	0.82
2011-12	5159.9	3.71	5.46	0.07
2012-13	4901.9	3.69	6.39	0.81
2013-14	5028.58	3.71	7.505	0.87
2014-15	5108.17	3.71	8.01	0.91
2015-16	5327.91	3.73	7.12	0.85
2016-17	5342.74	3.73	6.72	0.83
2017-18	5465.32	3.74	7.37	0.87

Table1: Source for fiscal deficit and GDP index:
<https://rbi.org.in/scripts/PublicationsView.aspx?id=17874>

The values of fiscal deficit and GDP are converted in log values

Regression analysis:

Multiple R	0.079920272							
R Square	0.00638725							
Adjusted R Square	-0.055713547							
Standard Error	0.227818856							
Observations	18							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0.005338215	0.005338215	0.102852946	0.75258316			
Residual	16	0.830422896	0.051901431					
Total	17	0.835761111						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.019144419	0.662975203	1.537228563	0.143776474	-0.386300227	2.424589065	-0.386300227	2.424589065
X Variable 1	-0.061784897	0.192652194	-0.320706948	0.75258316	-0.470189303	0.346619509	-0.470189303	0.346619509

Regression analysis shows r^2 as 0.00638725 and r as 0.07992072. There is a positive relation between fiscal deficit and GDP but it can be said as insignificant relationship as p-value is more than significant value that is ($1.43 > 0.05$).

So, we accept the null hypotheses.

FINDING

1. The finding of the paper indicates that there is positive and insignificant relationship between fiscal deficit and economic growth.
2. This study shows that it follows Recardian theory in case of Indian economy which says Fiscal deficit doesnot affect GDP of a country.
3. This study shows that fiscal deficit does not affect GDP and doesn't have adverse effect on GDP.
4. Fiscal deficit has a continuous fluctuations in last eighteen years.
5. GDP is also showing mild but continuous fluctuations in last eighteen years.
6. Recardian theory can be applied to other developing countries.

CONCLUSION

Fiscal deficit is the difference between government revenues and spending and GDP is the market value of the final goods and services. This study analysed relationship between fiscal deficit and GDP with the help of regression analysis that further concluded that fiscal deficit has not significant impact on GDP of India economy. So, fiscal deficit does not play crucial role in growth rate of a country as the analysis showed that fiscal deficit is not affecting directly the growth rate of the country.

REFERENCES

- Hussain Mohammed Ershad and Haque Mahfuzul, "Fiscal Deficit and Its Impact on Economic Growth: Evidence from Bangladesh", *Economies* 2017, 5, 37; doi:10.3390/economies5040037, 2017
- Anantha Ramu M R & Gayithri K., "Fiscal Deficit Composition And Economic Growth Relation In India: A Time Series Econometric Analysis", *Institute for Social & Economic Change (ISEC), Bangalore, 2016*
- Ahmad Najid , "The Role of Budget Deficit in the Economic Growth of Pakistan", *Volume 13 Issue 5 Version 1.0 Year 2013, ISSN: 2249-4588 & Print ISSN: 0975-5853*
- Goher Fatima, Ahmed Ather Maqsood, and Rehman Wali Ur , "Fiscal Deficit and Economic Growth: An Analysis of Pakistan's Economy", *International Journal of Trade, Economics and Finance, Vol. 2, No. 6, December 2011*
- Taylor Lance, Proano Christian R., Carvalho Laura de and Barbosa Nelson, *Fiscal Deficits, Economic Growth, and Government Debt in the USA*, www.economicpolicyresearch.org
- Reserve Bank of India - *Handbook of Statistics on Indian Economy*

WEBSITES

- <https://rbi.org.in/scripts/PublicationsView.aspx?id=17874>
- https://en.wikipedia.org/wiki/Gross_domestic_product
- <https://www.investopedia.com/terms/f/fiscaldeficit.asp>
- <https://economictimes.indiatimes.com › Definitions › Budget>