Does India's economic growth independent of fiscal deficit?

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Abstract

A more comprehensive indicator of the Government's deficit is fiscal deficit. The concept of fiscal deficit has become a major social and political issue in India. The main purpose of the study is to find out the impact of fiscal deficit to economic growth in Indian context covering the time period from 1991-92 to 2013-14. Coefficient of determination, F test and Durbin Watson test are adopted in order to examine the objectives of this study. The study found that there is no significant relationship between fiscal deficit and economic growth in Indian economic perspective. Finally we have suggested that, Government of India should focus on the human development indicators such as health, education and infrastructure development so that it will enhance the productivity of human and physical capital, which will increase the per capita income of people.

Introduction

India facing some of the major macroeconomic problems like internal and external debt trap, inflation, BOP deficit and low levels of investment leading to low rates of growth. Upton 1990, the concept of fiscal deficit was absent from official government documents, such as the budget and the Economic Survey (D'souza). It was only after the economic crisis of the early 1990s that fiscal consolidation made the fiscal deficit a focus of policy discussion.

In India fiscal deficit is defined as the excess of the sum total or revenue expenditure, capital outlay and net lending over revenue receipts and non debt capital receipts including the proceeds from disinvestment.

Fiscal Deficit = Total Expenditure (that is Revenue Expenditure + Capital Expenditure) – (Revenue Receipts + Recoveries of Loans + Other Capital Receipts (that is all Revenue and Capital Receipts other than loans taken))

High levels of fiscal deficit relative to GDP tend not only to cause sharp increases in the debt-GDP ratio, but also adversely affect savings and investment, and consequently growth. This paper examines the long- term profile of fiscal deficits in India and its impact on economic growth.

Review of literature

There is no agreement among economists whether financing government expenditure by incurring a fiscal deficit is good, bad or neutral in terms of its real effects, particularly on investment and growth (Mohanthy, 2011). There are three ways of the concerning economic effect of budget deficit as Ricardian, Keynsian and Neoclassical. The classical economists who assume a smooth functioning market where the market does no wrong in resources allocation and distribution and there is no need for government intervention in the economy. In the Keynesian model, increase in government expenditure leads to increases in output and economic growth, contrary to the neo-classical growth models that government fiscal policy does not have any effect on the growth of national output (Tajudeen Mehta Olatunji, 2012).

However, it has been argued that government fiscal policy (intervention) helps to improve failure that might arise from the inefficiencies of the market (Abu and Abdullah, 2010).
In the Indian context, Vuyyuri and Seshaiah (2004) have approached the study on the budget deficits and other macroeconomic variables and concluded that there is no significant impact of budget deficit on economic growth.

Objectives of study

The main objective of the study is examines the impact of Fiscal Deficit on Economic Growth. Specifically, the objectives are:

1) To get the knowledge about trend in Fiscal deficit and Economic growth.
2) To find out the relationship between Fiscal deficit and Economic growth.

Based on above literature, the following hypothesis is taken for the studies.

Hypothesis

H1: There is a significant impact of Fiscal deficit on the Economic growth.
H2: There is significant relationship between Fiscal deficit and Economic growth.

Methodology

The relevant data and information for the purpose of this study collected through secondary sources. Secondary data which are collected from the Central bank report. Further textbooks, news, magazines, Periodicals in the economic perspective and the Internet & some other sources were utilized for this study. Data on fiscal deficit and economic growth from the year 1991-92 to 2013-14 were collected for the study purpose. Various statistical methods and Econometrical method employed to find out the significant impact of fiscal deficit. (STATA statistical software has been utilized in this study.)

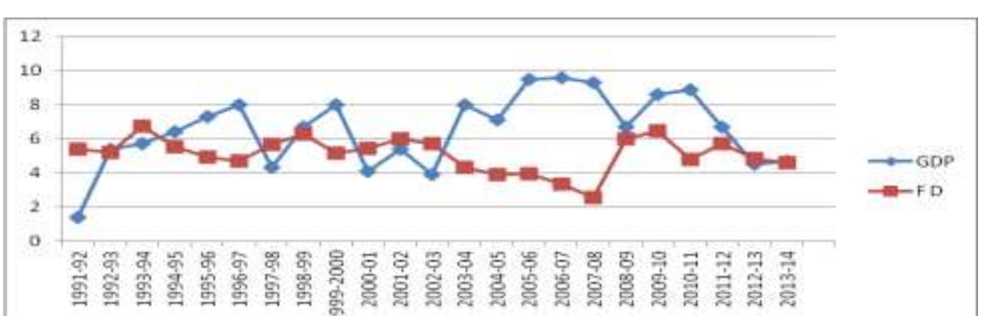
Deficits and Economic growth in India

Fiscal deficit and economic growth is one of the highly debated issues in all the world economies. Since 1933 Great economist Keynes suggested deficit budget. Earlier in planning period Government of India adopted fiscal deficit for development.

Gross Fiscal Deficit and Growth Rate of Gross Domestic Product

As it is clear from figure 1, India's Economic growth rate has been plotted against this GFD to GDP ratio for the period 1991-92 to 2013-14. According to time series, the economic growth was spread between 1 to 10 per cent. The gross fiscal deficit as percent of GDP 5.39 percent of GDP in 1991-92 to peak of 6.76 per cent in 1993-94 declined to 4.7 per cent in 1996-97. However, after 2003-04 central governments contained the fiscal deficit from 4.48 of GDP to its all time minimum of 2.54 per cent in the year 2007-08. Then it increased to 6.46 per cent in 2009-10 and declined 4.62 in 2013-14. This simple trend analysis is not sufficient for any valid inference. Therefore the study has used the advanced econometric technique.

Figure: 1



Econometric analysis

The purpose of regression analysis is to find out the significant impact of fiscal deficit on Economic growth. Model 1 presents the results of the Ordinary Least square in which, Fiscal deficit is considered as exogenous variable and economic growth considered as endogenous variable.

Therefore, we specify our model as:

$$G\_GDP = \beta_1 + \beta_2 X + e \qquad \ldots(1)$$

$$G\_GDP = 11.5 - 0.976025X$$

Model 1: OLS, using observations 1991-2013 (T = 23)
Dependent variable: GDP

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
Const	11.5056	2.07734	5.5386	0.00002	***
FD	-0.976025	0.399984	-2.4402	0.02363	**

Mean dependent var	6.530435	S.D. dependent var	2.112180
Sum squared resid	76.46711	S.E. of regression	1.908217
R-squared	0.220906	Adjusted R-squared	0.183806
F(1, 21)	5.954368	P-value(F)	0.023633
Log-likelihood	-46.45130	Akaike criterion	96.90260
Schwarz criterion	99.17359	Hannan-Quinn	97.47375
Rho	0.236146	Durbin-Watson	1.184355

The estimated standard deviation of the error term is 1.90. Further, regression model was applied to test that how far the exogenous variable impact on endogenous variable. R^2 known as coefficient of determination is the most commonly used measure of the goodness of fit of regression line. Verbally, R^2 measures the proportion or percentage of the total variation in Y explained by the regression model. The value of R^2 of 0.22 means that only 22 percent of the variation in GDP is explained by Fiscal deficit. R^2 suggests that the sample regression line does not fit the data well. According to regression analysis, there is no significant impact of fiscal deficit on economic growth ($F=5.95$; $P > .05$). it means the economic growth is contribute by other factors significantly. The Durbin Watson closed to 2 is consistent with no serial correlation, while a number closer to 0 means there is, probably, serial correlation. In our study, DW has the value as 1.18 which is closer to 2 so that there is no serial correlation between the variables which have been used in this study. Hence the H2 is rejected.

Conclusion

The study found that there is no significant relationship between fiscal deficit and economic growth in Indian economic perspective. Finally we have suggested that, Government of India should focus on the human development indicators such as health, education and infrastructure development so that it will enhance the productivity of human and physical capital, which will increase the per capita income of people

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