Impact of Fiscal Policy Shocks on the Indian Economy

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Abstract
The prime objective of this study is to analyze the impact of fiscal policy on the economy of India. For this purpose, we have taken the data from 1981 to 2010 and applied the Johansen co integration test, error correction model and variance decomposition model. Our results are showing that there is long run association between GDP and other variables. The prime objective of the fiscal policy is to deal with taxations and monetary policy is helpful to control the money supply. Consequently, Fiscal policy is the way of increase or decrease the inflation. Fiscal policy is the tool to control the fiscal deficit. To run the economy, there is need of proper fiscal policy. Our paper is trying to show that fiscal policy has always long run phenomena on the growth of the economy.

Keywords: Fiscal policy; Johansen co integration test; Error correction; Variance decomposition; GDP

Introduction
According to economic sciences, fiscal policy is known as the government revenue collection, which has influenced on the development of economy. According to Keynesian economics, aggregate demand can be affected by changing the levels of taxation. In the business circle, the purpose of fiscal cycle is to stabilize the development of the economy. These are two important tools, which can controlled the composition of taxation. These tools has influenced on the aggregate demand and saving. According to William, Fiscal policy can be derived from the monetary policy. The prime objective of the fiscal policy is to deal with taxations and monetary policy is helpful to control the money supply. There are three main types of fiscal policy 1) neutral fiscal policy 2) expansionary fiscal policy 3) contractionary fiscal policy. Business cycle is the way to represent the fiscal policy stance. There are some common methods of funding are as fellows.1) sale of fixed assets. 2) borrowing 3) consumption. The main purpose of utilize the fiscal policy is to maintain the level of aggregate demand. According to classical review, fiscal policy is the way to decrease the net exports of all the developing and under developing countries. Since the age of Adam smith, impact of fiscal policy on the development of economic growth, Landau takes into the account the association between government expenditures and economic growth. The main focus of this paper is to view the impact of fiscal policy on the development of the economic. According to neo-classical expenditure, when will increase public debt there will also increase in rate of interest. In all the countries, government expenditure impact on the inflation. Consequently, Fiscal policy is the way of increase or decrease the inflation. Fiscal policy is the tool to control the fiscal deficit. To run the economy, there is need of proper fiscal policy.

Objective
The prime objective of this paper is to analysis the impact of fiscal policy on the development of India from 1981 to 2010.

Problem statement
Impact of regulatory fiscal policy on Indian economic development (Figure 1).

Literature Review
Saqib and Yasmin analyzed the impact of fiscal policy on the economy of Italy. For this purpose, they had taken the data from 1998 to 2008 and applied the VECM. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [1].

Hussain observed the impact of fiscal policy on the economy of UK. For this purpose, they had taken the data from 1995 to 2005 and applied the VAR. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [2].

Marlow viewed the impact of fiscal policy on the economy of USA. For this purpose, they had taken the data from 1995 to 2005 and applied the OLS model. Their results were showing that there is short run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [3].

Ram examined the impact of fiscal policy on the economy of China. This purpose, they had taken the data from 1991 to 2001 and applied the Granger causality model. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [4].

Gupta, et al. observed the impact of fiscal policy on the economy of France. For this purpose, they had taken the data from 1999 to 2009 and applied the ECM model. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [5].

Hyder viewed the impact of fiscal policy on the economy of India. For this purpose, they had taken the data from 1990 to 2010 and applied
the multi-regression equation. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [6].

Looney observed the impact of fiscal policy on the economy of Pakistan. For this purpose, they had taken the data from 1990 to 2010 and applied the liner regression model. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [7].

Haque et al. and Montiel et al. viewed the impact of fiscal policy on the economy of Malaysia. For this purpose, they had taken the data from 1996 to 2006 and applied the Garch model. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [8].

Kelly T analyzed the impact of fiscal policy on the economy of India. For this purpose, they had taken the data from 1998 to 2008 and applied the VAR model. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [9].

Aschauer observed the impact of fiscal policy on the economy of India. For this purpose, they had taken the data from 1993 to 2003 and applied the ECM model. Their results were showing that there is long run association between fiscal policy and economy development. This study also suggested that Government should focus on the fiscal policy for the better improvement [10].

Theoretical framework

Theoretical framework is shown in Figure 2.

Methodology

The prime objective of this paper is to analyses that influence of fiscal policy on the development of economy of India. In this study, we have utilized the fiscal variables for the purpose of model comprise.

Equation:

\[ Y = \alpha + \beta_1 (NTX) + \beta_2 (IR) + \beta_3 (CPI) + \beta_4 (GXP) + \beta_5 (PG) + \beta_6 (GFCF) + \mu \]  

Where,

Y = Annual growth rate Gross Domestic Product
Results

The basic purpose of ADF test is to find out the variables is stationary or not. For this purpose, we have found the order of integration. We have seen that at the first difference all the series are stationary which is showing that all the variables are integrated at I(1). We have also used the Johansen cointegration to determine the there is long run relationship or not. We have also applied the (FPE), (AIC) and (SC) tests. Table 2 is showing that it is cointegartion at the level 5%. It is also showing that there is no exist the cointegration here. VECM is also showing the short run dynamic model [11-13]. The basic objective of showing the there is equilibrium in the exogenous shocks. Error equation is showing that error correction term of government expenditures, population growth. It is very difficult task for the interpreting of ECM [14,15]. The purpose of variance of decomposition is to measure the forecast error variables. In the Table 4 is showing that in the first year the real GDP was 100%. After the 4 years the fluctuation was verify. It was reducing with the ratio of 75%, 3%, 7%, net tax revenue is 5%. In the first period the ratio of NXT is 94%. However, the ratio of innovation is showing that there are minor changes in the 5th periods. In the Table 5 is showing that Granger causality test. Here, results are showing that unidirectional causality between GDPGR and CPI. Our results are also showing that there is unidirectional causality between interest rate and GDPGR.

Conclusion

The prime aim of this study is to analysis the both short and long run impact of fiscal policies on the development of India. According to Robert there is long run association between fiscal policy and economy

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<th>Variables</th>
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<th>Constant and trends</th>
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Note: the data is stationary at 5% significance level at critical value "-2.976263" for constant and critical value "-3.580623" for constant and trend.

<table>
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Trace test indicates 4 cointegrating eqn(s) at the 0.05 level.
* denotes rejection of the hypothesis at the 0.05 level.
**MacKinnon-Haug-Michelis (1999) p-values

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Max-eigenvalue test indicates 4 cointegrating eqn(s) at the 0.05 level.
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Table 2: Johansen co-integration test.
Table 3: Vector error correction model.

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Note: error term in ( ) and t-statistics in [ ].
of any country. For the proper results, we have applied the following models such as, Johansen co integration test, error correction model and variance decomposition model. Our results are showing that there is long run association between fiscal policy and economy of India and there are exogenous shocks between the variables. Our paper is trying to show that fiscal policy has always long run phenomena on the growth of the economy.

Suggestions

1) There is need of proper fiscal policies for the development of the economy.

2) Policy makers should focus on the fiscal policies before any decision.

3) For the proper results, there is need of control interest rate.

References
