ANALYSIS OF IMPACT OF FISCAL RESPONSIBILITY AND BUDGET MANAGEMENT ACT 2003 ON FISCAL POLICY AND ECONOMIC GROWTH BY USING ARDL BOUNDS TEST: MAJOR FINDINGS AND POLICY IMPLICATIONS

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Abstract: The union government enacted Fiscal Responsibility and Budget Management (FRBM) Act 2003 to check the degenerating fiscal deficit. However, targets of FRBM were mechanically achieved by union government in 2007-08. After global financial crisis, the government introduced various fiscal stimulus packages to compensate for the fall in private demand cause to once again worsen fiscal position of union and state government. This acute fiscal stress faced by union government compels government to cut down public expenditure in areas of education, health, infrastructure, social security and welfare while adhering fiscal targets fixed by thirteen finance commission through amendment of FRBM act in 2012. The reduction in quality of public expenditure has negative impact on economic growth and fiscal performance in the long run. With this background, a proposed study aims to examine how fiscal policy indicators as well as the FRBM act/subsequent amendments have influenced economic growth in India covering data from 1973 to 2015 and hence the study adopted the Auto Regressive Distributed Lag (ARDL) model in order to find out the short run and long run impacts of the various variables on economic growth in India. Further, the findings of the study reveals that the Net Fiscal deficit, Development Expenditure, Non-development expenditure, Revenue Expenditure, Interest Payment, Corporate Income Tax, Custom Duty, Nontax Revenue have positive and statistically significant relation with GDP only in the long run. Thus, it suggested government to re-examine fiscal consolidation rules and informed proper policy directions to improve quality of fiscal policy and economic growth.
Key Words: Economic growth, Fiscal policy, FRBM act, Public expenditure, Tax policy

I. INTRODUCTION

1. Background for the Study

Various Governments in the world have the aim of attaining economic development which implies an improvement in the quality of all facets of lives of citizens. Thus most governments have the aim of attaining and sustaining economic growth, reducing price levels, lowering unemployment and attaining international competitiveness through controlling balance of payments deficits which would help attain economic development. Broadly, in an attempt to achieve the above objectives, governments have resorted to both fiscal policy and monetary policy. Fiscal policy simply has to do with government revenue and expenditure whiles monetary policy has to do with the demand and supply of money in an economy. However, it is worth noting that, there could be trade-offs in Government’s attempt to achieve the above stated objectives.

Moreover, one of the highly debated topics among economists which still remain unsettled is how fiscal deficit affect economic growth. The proponents of the Keynesian school of thought believe that rising fiscal deficits as a result of investments (especially in infrastructure) in the public sector emanating from an appropriate policy design can incentive the private sector to invest more and hence leading to overall economic growth. Thus there would be rather “crowding in” of the private sector. On the other hand, classical and neo classical economists believe that high fiscal deficits due to rising investments in the public sector may “crowd out” the private sector due to rising interest rate especially if the deficits are financed through borrowing. It could also work via price level movements depending on the means of financing the investment and the utilization capacity level in the economy. Generally, public expenditure increases aggregate consumption in the economy which results in a fall in aggregate savings. Hence, higher interest rates due to falling aggregate savings, which in effect reduces private investment and total economic activity in a closed economy. However, in the context of an open economy, real currency appreciation and higher capital inflows resulting from higher public investment lead to lower net exports and hence a fall in economic activity. In the above argument, the implicit assumption is that the economy is already close to full capacity level (Kumar & Soumya, 2010).

Another view touted as the neo-Ricardian argument is that the impact on the economy as a result of rising public investment is neutral. Thus economic agents behaving rationally in the economy work to adjust their expenditure to be in line with movements in public expenditure. Therefore, there is no effect on the economy and total savings is also unaffected (Kumar & Soumya, 2010).
In the late 1980s and early 1990s, the Indian economy was bedevilled with huge fiscal deficits and monetization which affected the external sector. The situation was very bad to the extent that it made government unable to pay for 2 weeks of imports and hence leading to an economic crisis in 1991. This led to the emergence of economic reforms including fiscal consolidation. In the early 90s, these reforms performed very well, however fiscal consolidation stalled after 1997-98 and hence a resurgence of rising deficit. This made the Government to Introduce the Fiscal Responsibility and Budget Management (FRBM) Act 2003 to check the degenerating fiscal deficit. The FRBM rules were notified in July 2004. The aim of the Act is to ensure long run macroeconomic stability, inter-generational equity in fiscal management, better coordination between monetary and fiscal policy, and transparency with regards to Government’s fiscal activities. One of the targets of the Act was that, by 2008-09, fiscal deficit would be lowered to 3% of GDP with a target of 0.3% of GDP annually by the Central government. Further it was targeted to reduce revenue deficit by 0.5% of GDP annually with full elimination to be attained by 2008-09. The onus was on government to follow these targets and in case the targets are not attained, the Finance Minister had to explain and offer solutions (Rustagi, 2016). Thus form the FRBM Act, it is compulsory for the Central government to take steps toward, eliminating revenue deficit, reducing fiscal deficit and generating revenue surplus in the upcoming years. Therefore per the Act, both current and future Governments must work towards fiscal consolidation. Government can only deviate from the path of fiscal consolidation in the case of national security, natural calamity and other exceptional situations which may be specified by the Central Government (Rustagi, 2016).

The act further makes monetary policy autonomous of fiscal policy by barring government from borrowing from the Reserve Bank of India (RBI). The Act after 2006 also prohibited the RBI from purchasing primary issues of the Central Government securities and hence curbing monetization of government deficit. Also per the act, government is required to lay before parliament in each financial year, 3 policy statements which are: Macroeconomic Framework Policy Statement, Medium Term Fiscal Policy Statement and Fiscal Policy Strategy Statement. Amendments were made to the FRBM act 2003 via the Finance Act 2012, where the Medium Term Expenditure Framework Statement (MTEF) in addition to the previous 3 policy documents, shall be laid before both Houses of Parliament by the Central Government(Rustagi, 2016).

Concerning the amendments in 2012, appropriate measures must be taken by the Central Government to reduce revenue deficit, fiscal deficit and effective revenue deficit in order to oust the effective revenue deficit by March 31st, 2015 and hence generate adequate effective revenue surplus as well as attain revenue deficit of not more than 2% of GDP by March 31st, 2015. However, Vide the Finance Act 2015, elimination of effective revenue deficit has now been extended to March 2018. The fiscal deficit target of 3% has now also been extended to the end of 2017-18 (Rustagi, 2016). Thus, the study concentrate on how fiscal policy indicators affect economic growth given that economic growth is a prerequisite for economic development. Thus this study looked at how fiscal indicators such as taxation, public expenditure and fiscal deficits.
affected economic growth in India. In addition to these, the study also evaluates effectiveness of FRBM 2003 act on fiscal performance of union government.

2. Literature Review

The sound fiscal policy positively influences economic growth. However, the rational for fiscal policy rules widely discussed and debated in various literatures. Therefore, the literature review dealt with various theoretical and empirical works examine link between Government tax policy, Government expenditure, fiscal deficit and economic growth. Thus, the study, basically covered how fiscal policy and rules affect economic growth. The results are somewhat mixed on the empirical review and it can also be seen that, some of the methodologies adopted by these previous studies are unit root tests, Granger causality test, the Johansen Cointegration technique, Chow endogenous break test, the Auto regressive distributed lag (ARDL) model, the Unrestricted Vector Autoregressive model and the Ordinary least square regression technique among others. Considering all the works above on India, this study is unique due the following reasons below:

**Gap 1:** with regards to studies on the effect of fiscal deficit on economic growth, Raju and Mukherjee (2010), Bhoir and Dayre (2015), Rath and Sar (2016), Mohanty (n.d) and Navaratnam and Mayandy (2016) have conducted studies on India. However, this study used a more current data (data up to 2015) than all these studies above which means covering more post FRBM period and would better inform the impact of current fiscal reforms on growth. In addition this study is further novel because, Rath and Sar (2016) worked was on only Odisha and not the whole of India, Mohanty (n.d) used Johansen cointegration technique and this study used the ARDL approach which is suitable even when the other of integration of the variables are mixed rather than the inherent assumption in the Johansen technique that all variables must be I(1) and also Navaratnam and Mayandy (2016) did not study wholly or only on India but used a panel of countries that included India. Aside the above, the paucity of research on the subject matter further reinforced the need for our study.

**Gap 2:** with regards to studies on the effect of tax on economic growth, Chaurasia, Singh, and Sen (2016) just did descriptive analysis on India without any regression and Poirson (2006) also used data that is too old as compared to the one used by this study which covered more post FRBM period and would better inform the current impact of taxation on growth. Aside the above, the very few number of research conducted on the subject matter further reinforced the need for our study. In addition, this study used more recent data to find out how various components of taxes affected economic growth in India.

**Gap 3:** concerning the impact of Public expenditure on growth, Khundrakpam (2003), Altaf and Khan (n.d), Mallick (2008), Tamang (2011), Srinivasan (2013), Gangal and Gupta (2013), Lahirushan and Gunasekara (2015) and Giri, and Mohapatra (2016) have conducted studies on India. However, this study used more current data (data up to 2015) than all these studies above which means covering more post FRBM period and would better inform the impact of current fiscal reforms with regards to public expenditures and how they have affected economic growth. Also this study used more recent data to find out how several components of government expenditure affected economic growth in India. Further Altaf and
Khan (n.d) studied only Assam and not the whole of India, Tamang (2011) used Johansen cointegration technique but we used ARDL and Lahirushan and Gunasekara (2015) studied rather a panel of countries which included India.

3. Problem Statement

Even though the Government of India has strived using various acts such as the FRBM act 2003 with subsequent amendments targeted at generating fiscal consolidation and hence reducing overall fiscal deficit, Kumar and Soumya (2010) contend that in recent years, fiscal imbalances have remained a cause for worry in India. Thus irrespective of the fact that rises in revenue productivity due to direct taxes has been impressive, there is the fear of crowding out the private sector due to worsening fiscal imbalances. Concerns have also been raised about controlling fiscal deficit and government spending where government is expected to increase its expenditure to boost the economy while at the same time avoiding the negative effects of fiscal deficit by controlling it (Kumar & Soumya, 2010). Nirvikar Singh and Srinivasan (2004 as cited in Kumar & Soumya, 2010) also contend that, rather than focusing solely on primary balances, attention must be drawn towards optimal ways of public consumption, taxes, investment and borrowing in order to attain fiscal stability. Therefore, given that empirical studies on how fiscal consolidation or fiscal policy initiatives affect economic growth have been mixed, this study sought to find out how fiscal policy indicators as well as the FRBM act/subsequent amendments represented by a dummy variable, have impacted on economic growth. This study focused on how fiscal policy indicators as well as the FRBM act/subsequent amendments have affected economic growth because economic growth, as side being an indicator of economic performance is a sine qua non for economic development. Thus the study revealed to us how fiscal policy indicators as well as the FRBM act/subsequent amendments have influenced economic growth in India and hence informed proper policy directions using more recent data that covered most of the post FRBM period which to the best of our knowledge no study on India has done before.

4. Objectives of the Study

The general objective of the study was to evaluate Fiscal Performance of Union Government after FRBM 2003 act. However, specifically, the study tried to attain the following objectives:

1. To review growth pattern of fiscal indicators of union government during pre and post FRBM Act 2003.

2. To find out the elasticity of public revenue to development expenditure under FRBM Regime.

3. To evaluate the impact of composition (Quality) of public expenditure and public revenue on economic growth.

4. To examine how fiscal deficit affected GDP growth rate.
5. Hypotheses:

1. Development expenditure and economic growth is proportional in India.

2. The relationship between public revenue and economic growth is not steady in India.

6. Significance of the Study

Given the various attempts including the FRBM act made towards fiscal consolidation in India as well as the mix nature of empirical results on the effects of fiscal consolidation or fiscal deficits or fiscal indicators on economic growth, this study brought to light how fiscal deficit and the post FRBM period affected economic growth or GDP growth rate in India using more than two indicators of fiscal deficit as well as a more recent data. Thus it brought to light in Governments attempt to attain long term economic growth, which budget deficit indicator must be targeted. Also the study brought to light how the various components of tax revenue and the post FRBM period affected economic growth or GDP growth rate in India using at least two indicators of indirect tax and direct tax as well as a more recent data. Thus it helped in revealing which components of direct tax and indirect tax must be government’s focus in the attempt to use tax as part of the fiscal consolidation process to attain long term economic growth. Last but not the least, by decomposing the various components of public expenditure and finding out how they affected economic growth, the study sent definite signals to policy makers on which expenditures are more essential with regards to economic growth as part of the fiscal consolidation process. The descriptive analysis of various fiscal indicators such as public expenditure, public revenue and deficit indicators reveals to what extent FRBM act is effective in controlling fiscal deficit. Thus, this study helps policy makers in find out appropriate measures in order to improving fiscal performance of union government with out affecting economic growth under fiscal consolidation rules.

7. Methodology of the Study:

This study solely relied on time series secondary data on India from 1973 to 2015 obtained from the Reserve Bank of India (RBI) and Ministry of Finance (MOF (Government of India)). It must be stressed that, not all variables had data starting from 1973. The study adopted the augmented Dickey-Fuller and Phillips-Perron tests of unit root in order to test for the order of integration of the variables. Further, the study adopted the Auto Regressive Distributed Lag (ARDL) model in order to find out the short run and long run impacts of the various variables on economic growth in India. Thus the ARDL model was used to attain all the objectives of the study. In addition to empirical analysis, the growth rates of various fiscal indicators are also employed to examine fiscal performance of union government during pre and post FRBM act.

8. Summary of Major Findings

This subsection presented a summary of the findings of the study which involved findings on post and pre FRBM growth rates for various indicators, findings on how tax and its components affected economic growth, findings on how public expenditure and its components affected economic growth as well the findings on how fiscal deficits affected economic growth.
8.1 Comparative Analysis of Growth Rates of Various Fiscal Indicators during pre and post FRBM Period

[1] With Regards to Growth Pattern of various deficit indicators, development expenditure, total expenditure and total revenue, the findings suggested that FRBM has had a decreasing effect on their growth rates.

[2] On the growth rates of total direct taxes, total indirect taxes, total taxes and GDP, the findings suggest that FRBM has had an increasing effect.

[3] Regarding various components of expenditure, it was found that, FRBM has had an increased impact on expenditure on economic services, a decreased impact on social services expenditure and a marginal rising effect on revenue expenditure. In addition it was found that, the FRBM had a decreasing effect on expenditure on interest payments, subsidies and loans and advances, it rather had an increasing effect on capital expenditure and capital outlay.

[4] Concerning growth pattern of fiscal indicators, the study found that the FRBM had a declining effect in the mean growth rates of gross fiscal deficit, gross primary deficit and net primary deficit, it however had an increasing effect on net fiscal deficit, revenue deficit and GDP growth rate.

8.2 Elasticity of Public Revenue to Development Expenditure

With regards to impact of FRBM act on relationship between public revenue and development expenditure, it was found that, a 1% increase in public revenue led to a 0.74% increase in development expenditure in the long run in India. In addition, a unit rise in the post FRBM period was found to lead to a 0.17% fall in development expenditure. Thus the post FRBM period had a negative impact on development expenditure in India.

8.3 Impact of Public Revenue on Economic Growth

[1] The findings from the long run model showed that both direct taxes and indirect taxes had positive significant impacts on economic growth in India. However, in the short run, direct tax, indirect tax and the post FRBM dummy were found to have no statistically significant impact on economic growth in India.

[2] With regards to the impact of components of direct tax on economic growth in India, it was found that in the long run, personal income tax had no statistically significant impact on economic growth and corporate income tax having a statistically significant impact on economic growth in India. In the short run, personal income tax was found to have a negative impact on economic growth whiles corporate income tax was found to have a positive impact.

[3] Concerning the impact of components of indirect tax on economic growth in India in the long run, it was found that, excise duty had no statistically significant impact on economic growth where has customs duty had a positive statistically significant impact on growth. However, in the Short run, it was found that excise duty had a negative significant impact on economic growth; custom duty had a positive significant impact. A similar scenario was seen above for personal income tax and corporate income tax. However, both the post FRBM dummy did not have any statistically significant Impact of Components of Indirect Tax on Economic Growth model.
Concerning the impact of non-tax revenue on economic growth in India model, it was found that in the long run a 1% increase in non-tax revenue was found to lead to a 0.86% increase in economic growth in India and it is statistically significant. However, the post FRBM dummy was insignificant. Further, in the short run, it was revealed that all the variables with the exception of economic growth were statistically insignificant.

Concerning the impact of public revenue on economic growth in India model, it was found that a 1% increase in public revenue led to a 1% increase in economic growth in India. However, the post FRBM dummy was insignificant. In addition in the short run, economic growth and public revenue had statistically positive significant impacts on economic growth.

8.4 Impact of Various Components of Public Expenditure or Quality of Public expenditure on Economic growth

Concerning the impact of development and non-development expenditure model, it was found in the long run that, the post FRBM period did not have any statistically significant impact on economic growth. In addition, development and non-development expenditures had positive coefficients that were both statistically significant implying that they had positive significant effects on economic growth in the long run. In the short run however, none of the variables in the impact of development and non-development expenditure model had any significant impact on economic growth.

On the elasticity of GDP to defence expenditure model, in the long run, all the variables were not statistically significant. However, in the short run, GDP and capital defence expenditure were found to have statistically positive significant impacts on economic growth in India. However, the post FRBM dummy variable is not statistically significant.

Regarding the impact of interest payments, capital outlay and capital expenditure on economic growth model, in the Long run, capital expenditure and the post FRBM variable (dummy) had positive coefficients but were insignificant statistically. However, interest payments and capital outlay had positive statistically significant impacts on economic growth in India in the long run. In the short run, none of the variables except economic growth (positive impact) had any significant impact.

Concerning the impact of revenue expenditure, subsidies and loan advances on economic growth model, in the long run, it was found that subsidies, loans and advances and the FRBM dummy variable had insignificant coefficients. Thus, they did not have any statistically significant impact on economic growth in India in the long run. However, revenue expenditure was found to have a positive statistically significant impact on economic growth in the long run. In the short run apart from economic growth and revenue expenditure that had positive statistically significant impact on growth, none of the variables was significant. Thus subsidies, loans and advances and the FRBM dummy variable did not have any significant impact on economic growth both in the short run and long run periods.

With regards to the impact of total expenditure on economic growth model, in the long run, consistent with previous results above, the FRBM dummy variable did not have any significant impact on economic growth. However, total expenditure had a positive significant impact on economic growth in India in the long run. In the short run, concurring to previous results above, the FRBM dummy variable did not have any
significant impact on economic growth. However, economic growth and total expenditure had positive significant impact on economic growth in India in the short run.

8.5 Impact of Fiscal Deficit on Economic Growth

[1] Concerning the impact of gross fiscal deficit on economic growth model, it was found that in the long run, economic growth was not responsive to the changes in gross fiscal deficit, gross primary deficit and revenue deficit in India. Further in the short run, the post FRBM dummy was still insignificant. GDP and gross fiscal deficits had positive significant impacts on growth. Further, economic growth was not responsive to the changes in revenue deficit in the long run, it was responsive to its changes in the short run but in a negative direction.

[2] Concerning the impact of net fiscal deficit on economic growth model, it was found that in the long run, net fiscal deficit, net primary deficit and revenue deficit had positive, negative and negative significant impacts on economic growth respectively. However, it was found that the post FRBM variable (dummy) was statistically insignificant.

[3] Concerning the short run analysis, the study found that the net fiscal deficit had a negative significant impact on economic growth, where has net primary deficit had a positive significant impact. Also revenue deficit had a positive significant impact on economic growth though the FRBM indicator was still insignificant.

9. Conclusion and Policy Implications

The fiscal performance of Union Government of India before and after the FRBM Act 2003 is attempted in this research work so as to find out how far the new fiscal consolidation rules in India helped to attain the fiscal sector sustainability and overcome tremendous growth in fiscal deficits in turn promoted economic growth in India. From the descriptive analysis, it can be concluded that the growth rates of non-development expenditure, development expenditure, total expenditure and total revenue decreased during the post FRBM period relative to the pre FRBM period. Also it can be concluded that, whiles the post FRBM had lesser mean growth rates with regards to gross fiscal deficit, gross primary deficit and net primary deficit, it however had a higher net fiscal deficit, revenue deficit and GDP growth rates relative to the pre FRBM period. The regression result reveals that the fiscal consolidation rules have negative and statistical relation with public revenue and therefore, it counters negligency of social sector expenditure under FRBM act. Further, the empirical evidence reveals that the net fiscal deficit, total expenditure, revenue expenditure, interest payment, development expenditure, non development expenditure, public revenue, direct tax, indirect tax, corporate tax and custom duties have positive and statistically significant impact on economic growth. However, FRBM dummy variables have statistically insignificant relationship with economic growth. Thus, still there is the scope for further studies like; how the union government may re-examine the FRBM act and subsequent amendments overcome negative impact on development expenditure as results have showed that during post FRBM period have negative and statistically significant impact on development expenditure. As study believed and proved, in the long run, net fiscal deficit found to have an increasing effect on GDP growth rate. Thus it brought to light in Governments attempt to attain long term economic growth, which budget deficit indicator must be targeted. There is also the scope for undertaking
further study on to examine what measures towards increasing public revenue should be encouraged in the Indian context since it has shown to have an decreasing impact on development expenditure. Finally, research attempts may be made to find out influencing components of direct and indirect taxes to be used as policy tools long run growth using taxes. Thus simply it means that, not all the components of direct and indirect taxes have positive significant influences on economic growth. This is because the study has shown that using corporate income tax and custom duties as components of direct and indirect taxes respectively could be effective tools towards ensuring long run economic growth besides how far all public expenditures are bad but rather target specific expenditures that could be used to ensure long run economic growth. The descriptive analysis of various fiscal indicators such as public expenditure, public revenue and deficit indicators reveals to what extent FRBM act is effective in controlling fiscal deficit. Thus, this study helps policy makers in find out appropriate measures in order to improving fiscal performance of union government with out affecting social sector development and economic growth under fiscal consolidation rules. Also, it suggests policy maker’s and researchers to undertake studies on fiscal performance of sub-national and local self government.

From the findings and conclusion, the study therefore made the following policy recommendations below:

1. The Government of India should rather re-examine the FRBM act and subsequent amendments since it was revealed to have a negative impact on development expenditure.

2. In addition, care must be taken in executing the FRBM act and other fiscal consolidation reforms especially with regards to fiscal deficits since the study has shown that some fiscal deficits have positive impacts on economic growth or GDP growth rate in India. This is because, in the long run, the economic growth rate (GDP) positively responds to net fiscal deficit. Hence, a moderate level of fiscal deficit always conducive to economic growth particularly developing countries likes India which is characterized by poverty and unemployment.

3. Measures towards increasing public revenue should be encouraged in the Indian context since it has shown to have positive impact on development expenditure and economic growth.

4. Government of India attempts to influence long run growth using taxes, it is important to pay attention to which components of direct and indirect taxes to be used as policy tools. Thus simply it means that, not all the components of direct and indirect taxes have positive significant influences on economic growth. This is because the study has shown that using corporate income tax and custom duties as components of direct and indirect taxes respectively could be effective tools towards ensuring long run economic growth.

5. Also it can be recommended that Government should not see all public expenditures as bad but rather target specific expenditures that could be used to ensure long run economic growth. This is because development expenditure, non-development expenditure, interests payments; revenue expenditure and capital outlay were found to have increasing impacts on economic growth in the long run.
6. Moreover, further strengthening measures to generate more non-tax revenue should be instituted since it has been revealed to have a positive impact on economic growth.

7. The amount of indirect taxes has been decreasing in India particularly after new economic reform. Hence, this study also recommends government to implement necessary policy measures to increase productivity of GST.

8. It is clearly evidenced from descriptive analysis that the government totally denied social sector expenditure while adhering fiscal target. The social sector expenditure is essential to achieve economic growth in the long run. Thus, this study suggests government to achieve fiscal targets without damaging social sector development.

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