



Impact of Fiscal Responsibility and Budget Management act (FRBM) in Bihar

Swastika Satyam¹

¹PhD, Central University of South Bihar, Gaya, Bihar.

Abstracts

The need for fiscal consolidation and sustainability is one of the key macroeconomic issues confronting Indian economy. This paper discussed the effectiveness of FRBM before and after implementing its on India and Bihar. Here also examines the structure of government spending and its sources of revenue receipts, tax system, and government allocation of resources to state government. This paper looks into the current fiscal situation of Bihar. It is likely future development, and its impact on the economy in the context of a weak global recovery from the current crisis. Government aimed at continuing the momentum of aiding the growth revival of the economy and institutionalizing the co-operative federal fiscal relations while at the same time continuing on the path of fiscal consolidation. After the adoption of the Fiscal Responsibility and Budget Management Act in 2003, fiscal discipline has significantly improved in Bihar.

Keywords: FRBM, Fiscal deficit, Budget management.

Introduction

Crisis of 1991 brought to the fore several weaknesses of the Indian economic policies on all fronts. Increasing interest burden on account of rising debt, fiscal deficits, and interest rates created the problem of fiscal sustainability and raised concerns about debt-trap. However, fiscal correction in terms of a significant reduction in selected fiscal deficit indicators was sustained only during 1991-92 to 1996-97 (with an exception of 1993- 94). Thereafter, the trend reversed substantially for numerous reasons and the fiscal situation deteriorated significantly up to 2002-03. The need for fiscal adjustment may be seen in the context of the impact of the fiscal policy on stabilization and growth objectives, the sustainability of the fiscal policy stance, and the linkages between fiscal and other policy instruments. Persistent fiscal imbalances reduce national savings, leading to lower private investment and more tepid economic growth. High quality fiscal adjustment can mobilize domestic savings, increase the efficiency of resource allocation, and help meet development goals. Loose fiscal policy, on

the other hand, can lead to inflation, crowding out, uncertainty and volatility all of which are disturbs economic growth.

Fiscal responsibility and budget management act implemented in august 2003 in India with a viewing to fiscal consolidation and long term macroeconomic stability, estimated the reduction of fiscal deficit to 3% of GDP and also bring to revenue deficit to zero in 2008 by the minimum annual of 0.5 percent of GDP in revenue deficit and 0.3 percent of fiscal deficit reduction and to extend it to all the states in India. But combine fiscal deficit of central and states was 6% in 2008-09 onwards. Central government ensures that intergenerational equity in fiscal management and macroeconomic stability by achieving its revenue surplus and removing fiscal impediments in effective conduct of monetary policy and prudential management consists with fiscal sustainability through central government borrowing, debt and deficits, greater transparency in fiscal operation of the central government and conducting fiscal policy in medium term framework.

Bihar is one of the poor states of India. There is poor infrastructure development, resource gap with the bifurcation of Jharkhand in 2006. Bihar has most dependent on central transfer on development spending. Bihar lost its entire resource base for mining and mineral based industries in the south western part of the state. This was not only a major geographical platform for employment and income, but also an important revenue base for the government. On the other side, in Northern Bihar, the state frequently suffers from devastating floods on the Kosi and other rivers and also some regions are affected due to drought in southern Bihar. Bihar's per capita expenditure is lowest among all the general category states. Bihar also has the lowest per capita spending on education, health, social services overall and also economic services. Bihar suffers a huge deficit in its development spending on social and economic services and not more benefited provided by central transfers scheme. Thus Bihar government take initiative for achievement of enhanced human development and enrich infrastructure in this way stepping on toes effect of central government's fiscal consolidation policy.

Twelfth Finance Commission's recommendations, the Bihar Government enacted its Fiscal Responsibilities and Budget Management (FRBM) Act, entitled the Bihar Fiscal Responsibility and Budget Management Act, 2006 with a view to ensure prudence in fiscal management and fiscal stabilities by progressive elimination of revenue deficit, sustainable debt management consistent with fiscal stability, greater transparency in fiscal operations of the Government and conduct of fiscal policy in a medium-term fiscal framework. Act in 2006, committing the state to eliminate its revenue deficit by 2006-07, and to bring down the fiscal deficit to not more than 3 per cent by 2008-09.

The target to reduce revenue deficit to Zero as per the Twelfth Finance Commission recommendations was achieved and the State was running into a revenue surplus was due to grants-in-aid and the share of Union Taxes received from Government of India. Need to compress non-plan expenditure: The revenue expenditure was 80 *per cent* of the total expenditure of which 75 *per cent* was under non-plan, which also included expenditure on Salary, pension payment, interest liabilities and subsidies. Government expenditures can be

divided into (a) capital expenditure, which affects the assets and liabilities of the state, and (b) revenue expenditure, which includes the rest of the expenses. Capital expenditure includes which leads to creation of assets, repayment of loans, among others. Increasing fiscal liabilities accompanied by negligible rates of return on Government investment and inadequate interest cost recovery on loans and advances might lead to a situation of unsustainable debt in the medium to long run unless suitable measures are initiated to compress the non-plan revenue expenditure and mobilise of additional resources, both through the tax and non-tax sources. Bihar has enhanced the own tax revenue generation capacity. Bihar has total revenue receipts for 2016-17 are estimated to , an increase of 24% over the revised estimates of 2015-16. The tax to GSDP ratio is targeted at 5.32% in 2016-17, which is slightly more than the revised estimates of 5.26% in 2015-16. This implies that growth in collection of taxes has been higher than the growth in the economy.

Thus there is strong case for adopting fiscal responsibility legislation that involves a high degree of transparency, well designed, fiscal policy rules at national and sub national level (Kopits 2001). Fiscal policy rule should be well designed, transparent, adequate, consistent, simple, enforceable and efficient. A society with egalitarian should aim to keep down fiscal deficit and finance public expenditure through progressive taxation (Patanik 2006).

Objective of the studies

The objectives of the study is as follows

This Study examines the impact of fiscal policy rules under FRBM on fiscal balance in Bihar.

Data and Methodology of the study

FRBM was concerned to fiscal consolidation and check the deficit because this deficit obstructs the sustainable economic growth. This study examine whether the implement of FRBM has brought the fiscal balance in terms of reduction in Fiscal Deficit to GDP ratio.

The Story based on secondary data which is collected from various sources like from Hand Book of Statistics on Indian Economy 2014-15 published by Reserve Bank of India (RBI bulletin), Government of India, and economic survey of India 2014-15. The time Series data have been taken for the period from 1990-91 to 2013-14 this story uses ordinary least square technique (OLS). Ordinary Least Square (OLS) method has been analysis to examine the impact of FRBM Act on fiscal balance. Fiscal deficit to GDP ratio has been taken as the indicator of for fiscal balance. The study regress Fiscal Deficit to GDP (at market price) ratio against GDP (at factor cost) growth rate Population growth and FRBM to find out the impact of FRBM Act on fiscal balance.

Bihar Fiscal Situation

Fiscal stress is a problem that many states suffering. As stated in the RBI 2004-05 reports on the state finance the Gross Fiscal Deficit of states has raised in the second half of the 1990's and continues to remain very high. More than half gross fiscal deficit is caused by rising

revenue deficit. Rising revenue expenditure has been due to rise in interest payment and wage, pension obligations of the states. The fiscal reform facility (SFRF) provided additional revenues to the states that reduced their ratio of revenue deficit to revenue receipts: the accelerated power development program supports power sector reform o prevent large financial loses, and debt swap facility support restructuring high cost state debt with lower cost instruments to reduce the debt burden. SFRF was established under the eleventh finance commissions and its operation ceases in 2004-05. The debt swap facility also ended in 2004-05.the debt swap facility replaced by the Debt Relief Facilities (DRF) recommended by twelfth finance commission.

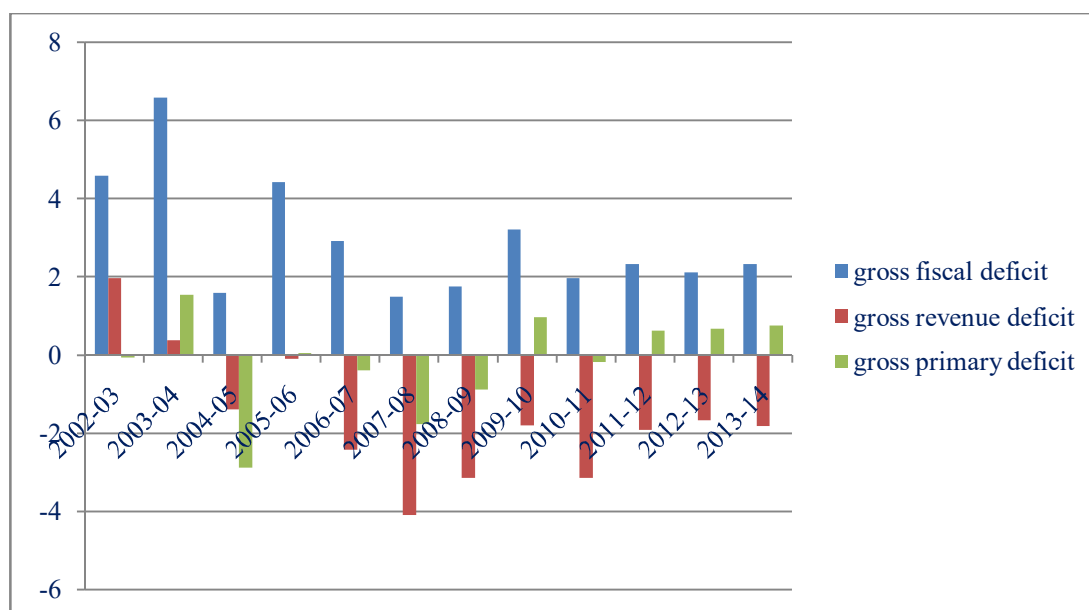
Revenue surplus for the first time in 2004-05, Bihar has been showing a continuous revenue surplus ever since. Revenue receipts increases by mainly due to the increase in tax revenues. Within the broad head of tax revenue, 52 percent of increase came from state’s share of central taxes and 48 percent from the states own revenue (Bihar economic survey). The revenue surplus of Bihar had slumped to its lowest level in 2009-10, but 2010-11 was year of recovery. In 2011-12 had witnessed the beginning of the slowing down of national economy and in that year the revenue surplus again decreased. In 2012-13 revenue surplus again improved, however fiscal deficit increased due to substantial increase in capital investment (economic survey 2015-16). Revenue receipts increases during 2012-13 over the previous year entirely due to growth in tax revenue (economic survey 2014-15).

Fiscal outcomes are:- the fiscal deficit had been consistently hovering around 5.5%. The government was carrying large amount of unutilised funds. It took an enormous loan which remained unutilised. The state had a revenue surplus with low level of planned expenditure and even lower level of capital expenditure.

Table 1: Trends of Deficit Indicator: Bihar Government

Year	Gross Fiscal Deficit	Gross Revenue Deficit	Gross Primary Deficit
2002-03	4.59	1.98	-0.05
2003-04	6.59	0.38	1.54
2004-05	1.59	-1.38	-2.68
2005-06	4.42	-0.09	0.06
2006-07	2.92	-2.41	-0.38
2007-08	1.49	-4.08	-1.76
2008-09	1.76	-3.14	-0.87
2009-10	3.21	-1.79	0.96
2010-11	1.96	-3.12	-0.17
2011-12	2.34	-1.90	0.63
2012-13	2.12	-1.65	0.68
2013-14	2.33	-1.81	0.76

Data source: Bihar economic survey 2014-15



Data source: Bihar economic survey 2007-2008 to 2014-15

Figure 1: Trends in Deficit Indicator (as a % of GSDP) of Bihar

The net resource gap of the state government is reflected by the Gross Fiscal Deficit (GFD) which is to be bridged by borrowing of one sort or another. The GFD is a fairly good indicator of the state's overall financial performance. The GFD: GSDP ratio had shot up to an unsustainable 6.5 percent in 2003-04 from 4.6 percent the year before; but it had finally brought down to a modest 1.5 percent by 2007-08. It had increased to 3.2 percent in 2009-10 when revenue surplus had plummeted. But then was brought down to 2 percent in the next year and 2.3 percent in 2011-12 and still sustained at 2.3 in 2013-14.

The GFD was mainly on account of the increasing levels of capital outlay throughout the period helped by the significant revenue surpluses, net lending constituting a small part of the GFD.

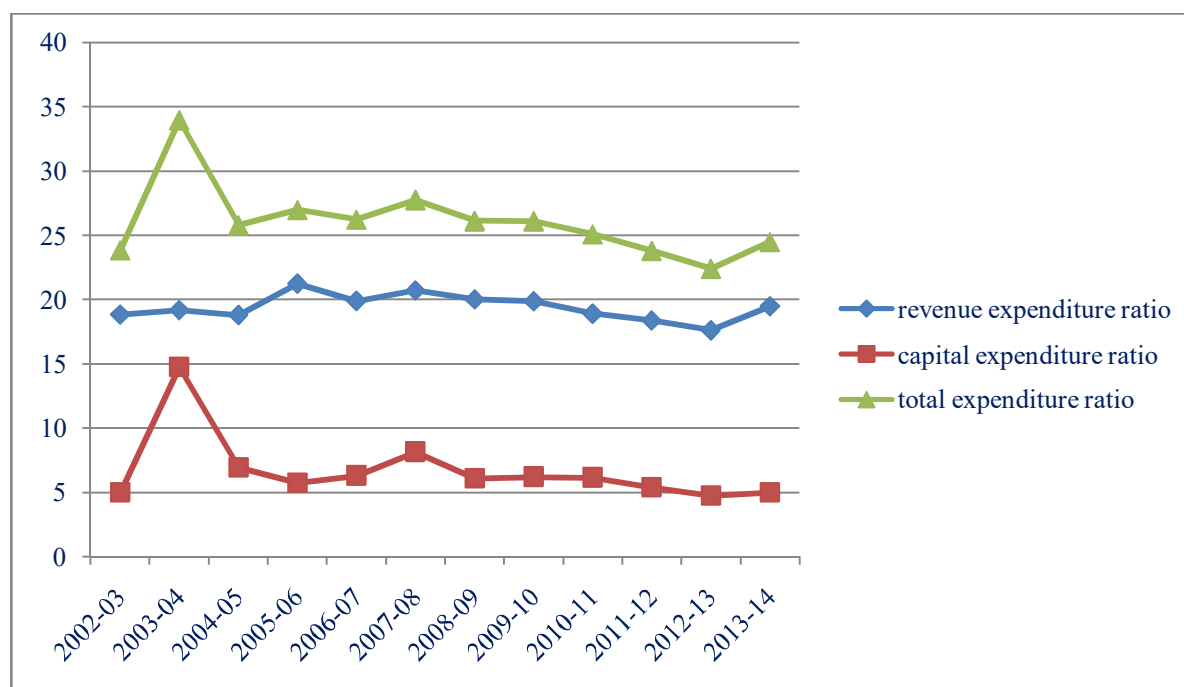
The revenue deficit was eliminated in 2004-05 itself even before the Act was passed and sufficient amount of revenue surpluses had been generated ever since. It is that also seen that Bihar had a continuous surplus in its primary account since 2007-08, indicating that its indebtedness was well under control.

Table 2: Trend of Bihar total expenditure

Year	Revenue Expenditure	Capital Expenditure	Total Expenditure
2002-03	18.864	5.00	23.86
2003-04	19.20	14.76	33.97
2004-05	18.81	6.96	25.78
2005-06	21.25	5.75	27.01
2006-07	19.92	6.34	26.26
2007-08	20.72	8.17	27.77
2008-09	20.03	6.11	26.13
2009-10	19.89	6.23	26.12

2010-11	18.93	6.18	25.11
2011-12	18.40	5.41	23.81
2012-13	17.64	4.77	22.42
2013-14	19.50	5.01	24.51

Data source: Bihar economic survey 2007-08 to 2014-15

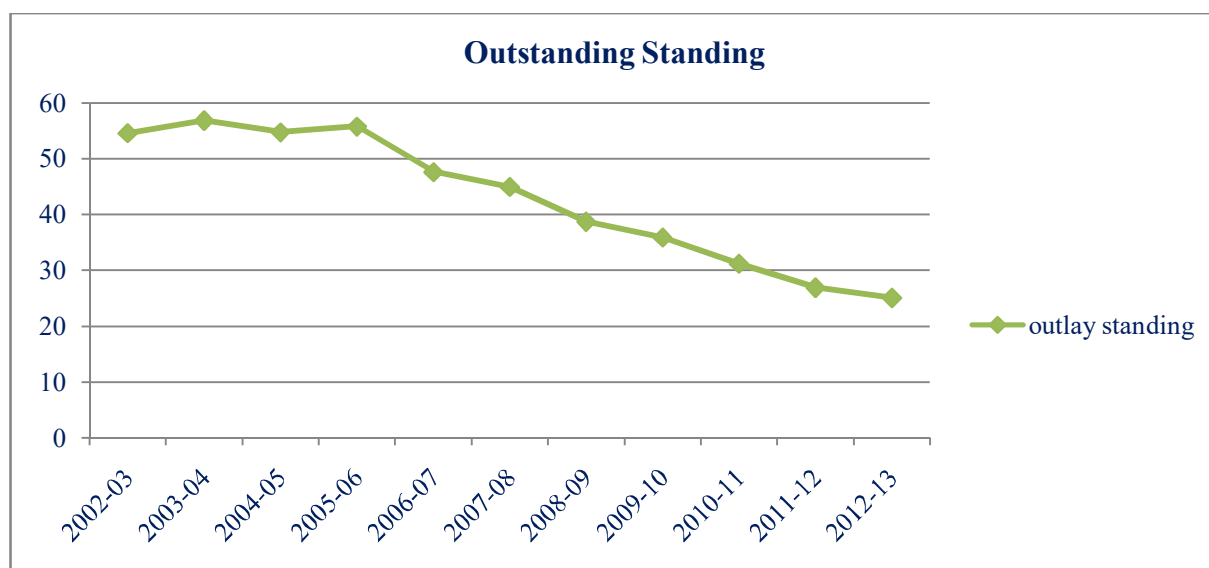


Data source:-Bihar economic survey 2007-08 to 2014-15

Figure 2: Bihar Government: Trends in government expenditure (as a % of GSDP)

Revenue expenditure of the state government during 2002-03 to 2007-08 it was readily seen that revenue expenditure constitute the bulk of total expenditure, amounting more than 70 percent of total expenditure(economic survey 2013-14). The share of general services in revenue in revenue expenditure came down significantly the period 2001-2012, with consequent increases in the expenditure on both social and economic services. These services surged revenue receipts. Salary and pensions are most of the important items of expenditure for all the government. The growth rate of pensions during 2007-08 was high. The state government has now implemented the contributory scheme on the pattern of central government to reduce the long liability on pension account. Salary and pension payments together constitute more than 42% of the state government (economic survey 2013-14). In this way helps in fulfil in FRBM targets.

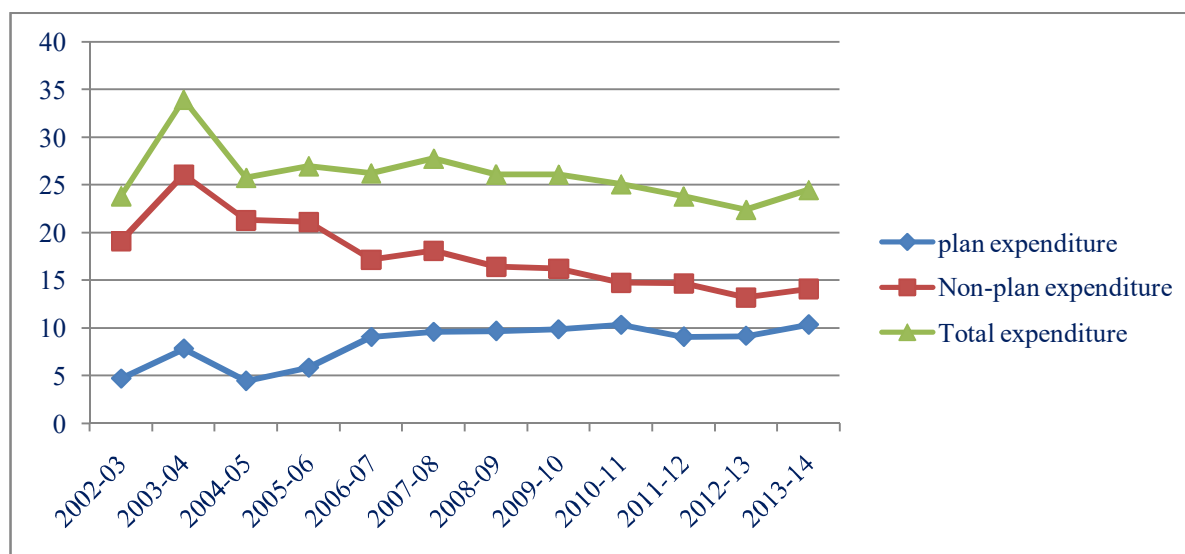
In 2002-03, the share of capital expenditure was only 6 percent. A significantly changes in capital expenditure was 14.76 percent. After that, capital expenditure marginally changes and lies between 6 % to 8% from 2004-2014 which translated into higher growth of the state economy. It has a less share in total expenditure all over the year.



Data source: - Bihar economic survey 2014-15

Figure 3: Trend of outstanding liabilities

Total outlay standing has decreasing trend. The liability on account of public debt has been rising at an average since 2008-09. Major part of this standing debt about 85 percent is due to internal loans raised by the state government and 15 percent due to loans from central government. The composition of outstanding debt has undergone structural change over the years with the share of central loans coming down dramatically.



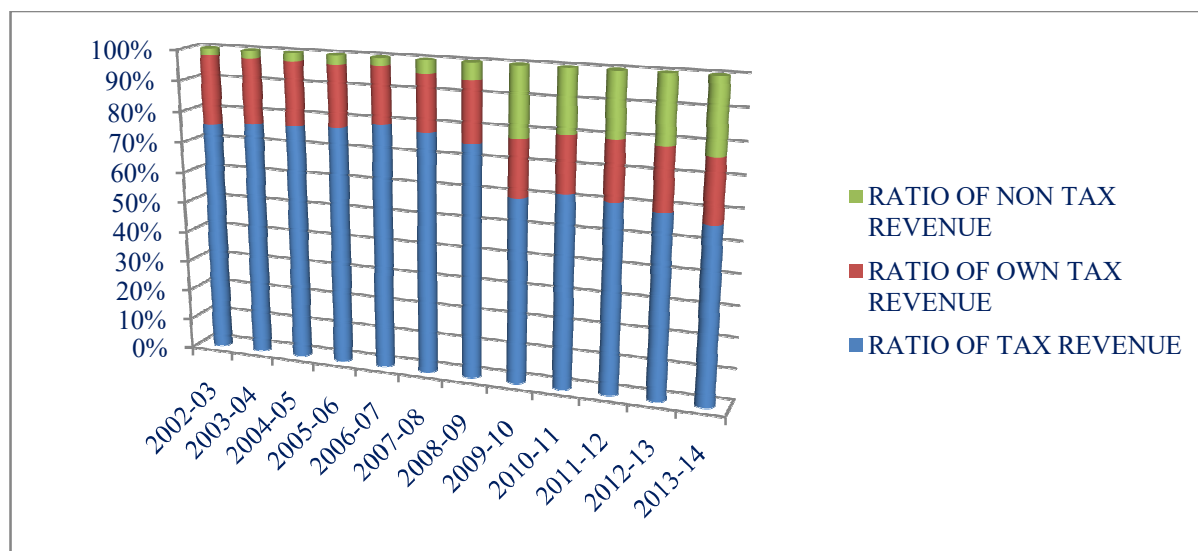
Data source: - Bihar economic survey 2013-14

Figure 4: Trend of expenditure of Bihar

It is observed that the share of non-plan expenditure has been reduced steadily from 70% of total expenditure in 2002-03 to 57% in 2012-13. The plan revenue expenditure was distributed more or less evenly between the revenue and capital accounts, and interest payment.

Report of the Rangarajan committee on efficient management on efficient management of public expenditure submitted in 2011. The committee recommended the removal of distinction between plan and non-plan expenditure on the ground that budget neither provides

satisfactory classification of development and non-developmental dimensions of government expenditure. Developmental expenditure is good for economy and further acceleration of growth .the fiscal situation worsen in 2011-12 due to adverse macroeconomic scenario country as a whole and didn't recover even 2012-13.



Data source: Bihar economic survey 2014-15

Figure 5: Share of tax structure

The low tax ratio indicates tax compliance. The ratio of total tax receipts to GSDP consistently increased from 14 to 16 percent , while states own revenue to GSDP almost the same in the range of 4 to5 percent, stagnant at around 4% till 2008-09 and since then grown just above 5% in 2011-12. In 2012-13, the ratio improved marginally to 5.3%. Since this ratio is much lower compared to other states. Non -tax revenue share in total tax revenue is very less. The state non-tax revenue increased in 2008-09. Tax revenue constituted more than 80 percent of total revenue. Revenue surplus for the first time in 2004-05 Bihar has been showing continuous revenue surplus ever since. Revenue receipts increases by mainly due to the increase in the tax revenues.

Table 3: Central government assistance to Bihar government for development

Year	State plan	Central plan	Centrally sponsored scheme	Total	Non plan	Total	Balance from current account(BCR)
2002-03	670 (39.7)	437 (25.9)	290 (17.2)	1397 (82.8)	290 (17.2)	1687 (100.0)	-1040
2003-04	1169 (72.2)	46 (2.8)	251 (15.5)	1466 (90.6)	152 (24.2)	1618 (100.0)	-638
2004-05	1643 (58.0)	10 (0.4)	495 (17.5)	2148 (75.8)	684 (24.2)	2832 (100.0)	924
2005-06	1556 (46.7)	90 (2.7)	486 (14.6)	2132 (64.0)	1201 (36.0)	3333 (100.0)	686
2006-07	2445	144	974	3563	1683	5246	2999

	(46.6)	(2.7)	(18.6)	(67.9)	(32.1)	(100.0)	
2007-08	2914 (50.0)	53 (0.9)	1360 (23.3)	4327 (74.2)	1505 (25.8)	5832 (100.0)	5124
2008-09	3600 (45.2)	135 (1.7)	1677 (21.1)	5412 (68.0)	2550 (32.0)	7962 (100.0)	6337
2009-10	3721 (49.2)	138 (1.8)	1449 (19.2)	5308 (70.2)	2256 (29.8)	7564 (100.0)	6074
2010-11	5457 (56.3)	176 (1.8)	2141 (22.1)	7774 (80.2)	1925 (19.8)	9699 (100.0)	9442
2011-12	5065 (51.2)	96 (1.0)	2159 (21.8)	7320 (74.1)	2563 (25.9)	9883 (100.0)	9987

The transfer of resources through different sources in different sources in different modes of resources transfer (taxes, loans and grants in aid) has different acts on the economy. Different states have different revenue raising abilities, they need different for development and poverty alleviation related expenditure. The relative ratio of loans and grants are different. In Gadgil-Mukherjee formula for general category states, assistance was 30 percent grants and percent loans. The Gadgil-Mukherjee formula works on two stages. First 30 percent of total assistance for special category states, this may be due to states on basis of their plan size and past expenditure. The remaining 70 percent are distributed among general category state according to a set of criteria with relative weights.

Shows the trend of revenues from grants and contributions from the central government for the period 2002-12. In 2011-12, more than half the total grants (51 percent) were for the State Plan Schemes, followed by 22 percent for Centrally Sponsored Schemes. The Non-Plan Grants accounted for 26 percent of the total grants in 2011-12. The total grants have increased at an annual rate of 21.70 percent during the period 2002-12, while the grants for the Centrally Sponsored Schemes had remained practically unchanged during 2011-12. The Non-plan grants increased significantly during 2011-12.

It goes to the credit of the state government that it was able to generate substantial Balance from Current Revenues (BCR) for plan expenditure from 2006-07 onwards. A positive BCR shows that the state government has surplus funds from its revenue for meeting the plan expenditure. After 2004-04 has positive Balance from current account (CR). Thus it helps to correct of fiscal deficit.

Regression Analysis of FRBM in India and Bihar

The data have been collected from secondary sources from Hand Book of Statistics on Indian. Economy 2014-15 published by Reserve Bank of India (RBI), Government of India. The yearly time series data have been taken for the period from 1990 -91 to 2013-14. In this study, using statistical tool is ordinary least square method (OLS). Ordinary Least Square (OLS) method has been applied to examine the impact of FRBM Act on fiscal balance. Fiscal deficit to GDP ratio has been taken as the indicator of for fiscal balance. The study regress

Fiscal Deficit to GDP (at market price) ratio against GDP (at factor cost) growth rate Population growth and FRBM to find out the impact of FRBM Act on fiscal balance.

$$\text{Fiscal Deficit} = (\text{Revenue Receipt} + \text{Capital Receipt}) - \text{Total Expenditure}$$

$$\text{Revenue Receipt and Capital Receipt} = f(\text{Gross Domestic Product})$$

$$\text{Expenditure} = f(\text{Population})$$

So here Fiscal Deficit to Gross Domestic Product is a function of Gross Domestic Product Growth

Rate, population Growth Rate and FRBM:

$$FD/GDP = f\{GDFC, PG, FRBM\}$$

Symbolically, the model can be written as:

$$FD_GDP = \beta_0 + \beta_1 GDFC_t + \beta_2 PG_t + \beta_3 FRBM_t + u_t \quad (1)$$

Here

$$FD_GDP = \text{Gross Fiscal Deficit} / \text{GDP (at market price)};$$

$$GDP = \text{Gross Domestic Product at Market Price};$$

$$GDFC = \text{Gross Domestic Product Growth Rate at Factor Cost}$$

$$PG = \text{Population Growth Rate}$$

FRBM (here FRBM is dummy is taken as 1 for year which have FRBM and 0 is for other years).

Table 4: India's empirical analysis

dependent variable : FD_GDP				
Method : least squares				
Sample : 1990 – 2013				
included observations : 24				
Variable	coefficient	Std. Error	t – statistics	prob.
C	4.876324	2.942740	1.657069	0.1131
G	0.015667	0.80334	0.195024	0.8473
PG	0.325269	1.687585	0.192742	0.8491
D1	-0.993537	1.023304	-0.970911	0.3432
R- squared	0.275564	Mean dependent var	5.193939	
Adjusted R-square	0.166899	S.D dependent var	1.123344	
S.E of regression	1.025325	Akaike info criterion	3.038907	
Sum squared resid	21.02581	Schwarz criterion	3.235250	
Log likelihood	-32.46689	Hannan –quinn criter	3.090997	
F-Statistics	2.535900	Durbin- Watson stat	1.405098	
Prob(statistics)	0.085769			

The study regress FD_GDP on GDP, P, G and FRBM to find out impact of FRBM act on fiscal balance in India. The model uses OLS technique, here R Square value is 0.275, Durbin Watson stat (D -W Values) is 1.405 and adjusted R square value is 0.166.

Dependent variable : FD_GSDP
Method : least squares

Least square estimation results suggests that the coefficient of dummy variable for FRBM has told out to be negatively significant. It might implies that though the policies under FRBM has brought some changes, about fiscal indicator. Negative due to increase in government non – plan expenditure like sixth pay commission, MGNREGA, Rising subsidy bill, increase in capital defence expenditure in period of 2008-09 – 2011-12. After that also implementation of seventh pay commission and One Rank One pension scheme in 2015-16 may be increase the burden of government but it may be offset by cutting down in subsidy and DBT (Direct Benefit Transfer) Schemes.

Similarly G the coefficient of GDP is positively significant which states that increase in growth rate of country's GDP has more or less impact in fiscal balances and reduction in fiscal deficit. Government might spending huge amount on subsidies, infrastructure, electricity, power generations, road, highway construction, and for human development it gives a positives outcomes. But its t- value is less than two so no more significant. Coefficient of population growth is positively related to fiscal deficit it is statistically significant and significant impact on fiscal balance.

Coefficient of R square explains that the 27% variations in fiscal balance are mainly due to explanatory variable such that growth of GDP, population growth, FRBM (Dummy variable) etc.

Table 5: Bihar regression analysis

Sample : 2002 -2013				
included observations : 12				
Variable	Coefficient	Std. error	t –statistics	prob.
C	1.847452	1.253844	1.473431	0.1789
G	-0.077821	0.44821	1.736265	0.1207
PG	1.698363	0.508049	3.342911	0.01207
D1	0.854928	0.585575	-0.829991	0.0102
R – Squared	0.0854928	mean dependent var		2.948408
Adjusted R-square	0.80025	S.D dependent var		1.537665
S.E of regression	0.686761	Akaike info criterion		2.347540
Sum squared resid	21.02581	Schwarz criterion		2.509176
Log likelihood	-32.46689	Hannan – Quinn criter		2.287697
F– statistics	2.35900	Durbin Watson stat		2.323615
Prob (statistics)	0.85769			

Discussion and Conclusion

Least square estimation results suggest that the coefficient of dummy variable for FRBM has told that out to be negatively significant. It might imply that though the policies under FRBM have brought some changes about fiscal changes fiscal indicators, but it might help effectively in later ones (long term).

Similarly G, the coefficient of growth of GDP is negatively significant which states that government might to spending huge amount on subsidies, infrastructure development, social security, human development indicator improvement health, education, decent etc. The coefficient of Population growth is positively related that is, it is statistically significant impact on fiscal balance. Population growth have significant impact on gross fiscal deficit to GSDP because its t value is greater than two thus it has statistically significant and its contribute more in direct as well as indirect taxes to generate revenue of a government further investment in plan and productive expenditure. Coefficient of R^2 explains that the 85% variations in fiscal balance are mainly due to explanatory variables such that growth of GSDP, population growth.

The fiscal policy of the Government needs to be guided by the larger macroeconomic needs of higher investments for higher growth. The investment focus is primarily in the agricultural and rural sectors, having substantial potential for higher growth. Higher levels of infrastructural investments particularly in the 21 roads sector including rural roads, railways, waterways, power etc. are the other focus areas for supporting the goals of building up growth momentum. Thus fiscal consolidation strategy rests on two important pillars of gradual increase in tax GDP ratio and rationalization of expenditure as a percentage of GDP by curtailing non-developmental expenditure. Tax policy of the Government therefore, remains an important tool in achieving the projected goals of fiscal consolidation in the medium term.

References

- Government of Bihar Economic survey of Bihar 2014-15.
- Government of India Fourteen finance commission report.
- Government of India Thirteen finance commission report.
- Govt. of India. (2010). Report of The Twelfth Finance Commission, Ministry of Finance, 2010–2015, New Delhi. Economic survey of India 2014-15.*
- Kopits, G. (2001). Fiscal rules: useful policy framework or unnecessary ornament?. *Available at SSRN 2094462.*
- Patnaik, P. (2006). What Is Wrong with 'Sound Finance'. *Economic and Political Weekly*, 4560-4564.